



CITY OF HOBART

AGENDA

City Planning Committee Meeting

Open Portion

Monday, 24 January 2022

at 5:00 pm

via Zoom

THE MISSION

Working together to make Hobart a better place for the community.

THE VALUES

The Council is:

People	We care about people – our community, our customers and colleagues.
Teamwork	We collaborate both within the organisation and with external stakeholders drawing on skills and expertise for the benefit of our community.
Focus and Direction	We have clear goals and plans to achieve sustainable social, environmental and economic outcomes for the Hobart community.
Creativity and Innovation	We embrace new approaches and continuously improve to achieve better outcomes for our community.
Accountability	We are transparent, work to high ethical and professional standards and are accountable for delivering outcomes for our community.

ORDER OF BUSINESS

Business listed on the agenda is to be conducted in the order in which it is set out, unless the committee by simple majority determines otherwise.

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City Planning Committee Meeting (Open Portion) held Monday, 24 January 2022 at 5:00 pm via Zoom.

This meeting of the City Planning Committee is held in accordance with a Notice issued by the Premier on 3 April 2020 under section 18 of the *COVID-19 Disease Emergency (Miscellaneous Provisions) Act 2020*.

The title Chief Executive Officer is a term of reference for the General Manager as appointed by Council pursuant s.61 of the *Local Government Act 1993* (Tas).

COMMITTEE MEMBERS

Deputy Lord Mayor Councillor H Burnet
(Chairman)
Alderman J R Briscoe
Councillor W F Harvey
Alderman S Behrakis
Councillor M Dutta
Councillor W Coats

Apologies:

Leave of Absence: Nil.

NON-MEMBERS

Lord Mayor Councillor A M Reynolds
Alderman M Zucco
Alderman Dr P T Sexton
Alderman D C Thomas
Councillor J Fox
Councillor Dr Z Sherlock

1. CO-OPTION OF A COMMITTEE MEMBER IN THE EVENT OF A VACANCY

2. CONFIRMATION OF MINUTES

The minutes of the Open Portion of the City Planning Committee meeting held on [Monday, 13 December 2021](#), are submitted for confirming as an accurate record.

3. CONSIDERATION OF SUPPLEMENTARY ITEMS

Ref: Part 2, Regulation 8(6) of the *Local Government (Meeting Procedures) Regulations 2015*.

Recommendation

That the Committee resolve to deal with any supplementary items not appearing on the agenda, as reported by the Chief Executive Officer.

4. INDICATIONS OF PECUNIARY AND CONFLICTS OF INTEREST

Ref: Part 2, Regulation 8(7) of the *Local Government (Meeting Procedures) Regulations 2015*.

Members of the Committee are requested to indicate where they may have any pecuniary or conflict of interest in respect to any matter appearing on the agenda, or any supplementary item to the agenda, which the Committee has resolved to deal with.

5. TRANSFER OF AGENDA ITEMS

Regulation 15 of the *Local Government (Meeting Procedures) Regulations 2015*.

A Committee may close a part of a meeting to the public where a matter to be discussed falls within 15(2) of the above regulations.

In the event that the Committee transfer an item to the closed portion, the reasons for doing so should be stated.

Are there any items which should be transferred from this agenda to the closed portion of the agenda, or from the closed to the open portion of the agenda?

6. PLANNING AUTHORITY ITEMS - CONSIDERATION OF ITEMS WITH DEPUTATIONS

In accordance with the requirements of Part 2 Regulation 8(3) of the *Local Government (Meeting Procedures) Regulations 2015*, the Chief Executive Officer is to arrange the agenda so that the planning authority items are sequential.

In accordance with Part 2 Regulation 8(4) of the *Local Government (Meeting Procedures) Regulations 2015*, the Committee by simple majority may change the order of any of the items listed on the agenda, but in the case of planning items they must still be considered sequentially – in other words they still have to be dealt with as a single group on the agenda.

Where deputations are to be received in respect to planning items, past practice has been to move consideration of these items to the beginning of the meeting.

RECOMMENDATION

That in accordance with Regulation 8(4) of the *Local Government (Meeting Procedures) Regulations 2015*, the Committee resolve to deal with any items which have deputations by members of the public regarding any planning matter listed on the agenda, to be taken out of sequence in order to deal with deputations at the beginning of the meeting.

7. COMMITTEE ACTING AS PLANNING AUTHORITY

In accordance with the provisions of Part 2 Regulation 25 of the *Local Government (Meeting Procedures) Regulations 2015*, the intention of the Committee to act as a planning authority pursuant to the *Land Use Planning and Approvals Act 1993* is to be noted.

In accordance with Regulation 25, the Committee will act as a planning authority in respect to those matters appearing under this heading on the agenda, inclusive of any supplementary items.

The Committee is reminded that in order to comply with Regulation 25(2), the Chief Executive Officer is to ensure that the reasons for a decision by a Council or Council Committee acting as a planning authority are recorded in the minutes.

7.1 APPLICATIONS UNDER THE HOBART INTERIM PLANNING SCHEME 2015

7.1.1 1/14 LORD STREET, 2/14 LORD STREET, 12 LORD STREET, SANDY BAY - PARTIAL DEMOLITION, ALTERATIONS, EXTENSION AND TWO MULTIPLE DWELLINGS (TWO EXISTING AND TWO PROPOSED) PLN-21-532 - FILE REF: F22/4028

Address:	1/14 Lord Street, 2/14 Lord Street, 12 Lord Street, Sandy Bay
Proposal:	Partial Demolition, Alterations, Extension and Two Multiple Dwellings (Two Existing and Two Proposed)
Expiry Date:	3 February 2022
Extension of Time:	Not applicable
Author:	Mark O'Brien

RECOMMENDATION

That pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for partial demolition, alterations, extension, and two multiple dwellings (two existing and two proposed), at 1/14 Lord Street, 2/14 Lord Street and 12 Lord Street Sandy Bay 7005 for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-21-532 - 1/14 LORD STREET SANDY BAY TAS 7005 - Final Planning Documents, except where modified below.

Reason for condition

To clarify the scope of the permit.

TW

The use and/or development must comply with the requirements of TasWater as detailed in the form Submission to Planning Authority Notice, Reference No. TWDA 2021/01404-HCC dated 23 November 2021 as attached to the permit.

Reason for condition

To clarify the scope of the permit.

PLN 1

Screening to a height of 1.7m above the finished floor level, with no more than 25% uniform transparency, must be installed and maintained along the western edge of the terrace above the garage prior to first occupation.

Reason for condition

To provide reasonable opportunity for privacy for dwellings.

PLN s1

No works are approved on 11 Duke Street as part of this planning permit.

Reason for condition

To clarify the scope of the permit.

ENG sw1

All stormwater from the proposed development (including but not limited to: roofed areas, ag drains, and impervious surfaces such as driveways and paved areas) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

ENG 3a

The access driveway, and parking module (parking spaces, aisles and manoeuvring area) must be designed and constructed in accordance with Australian Standard AS/NZS 2890.1:2004 (including the requirement for vehicle safety barriers where required), or a Council approved alternate design certified by a suitably qualified engineer to provide a safe and efficient access, and enable safe, easy and efficient use.

Advice:

It is advised that designers consider the detailed design of the access and parking module prior to finalising the Finished Floor Level (FFL) of the parking spaces (especially if located within a garage incorporated into the dwelling), as failure to do so may result in difficulty complying with this condition.

Reason for condition

To ensure the safety of users of the access and parking module, and compliance with the relevant Australian Standard.

ENG 4

The access driveway and parking module (car parking spaces, aisles and manoeuvring area) approved by this permit must be constructed to a sealed standard (spray seal, asphalt, concrete, pavers or equivalent Council approved) and surface drained to the Council's stormwater infrastructure prior to the commencement of use.

Reason for condition

To ensure the safety of users of the access driveway and parking module, and that it does not detract from the amenity of users, adjoining occupiers or the environment by preventing dust, mud and sediment transport.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or

2. Be repaired and reinstated by the owner to the satisfaction of the Council.

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENV 1

Sediment and erosion control measures sufficient to prevent sediment from leaving the site must be installed prior to any disturbance of the site, and maintained until all areas of disturbance have been stabilized or re-vegetated.

Advice:

For further guidance in preparing a Soil and Water Management Plan – in accordance with Fact sheet 3 Derwent Estuary Program click [here](#).

Reason for condition

To avoid the sedimentation of roads, drains, natural watercourses, Council land that could be caused by erosion and runoff from the development, and to comply with relevant State legislation.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must

inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

STORMWATER

Please note that in addition to a building and/or plumbing permit, development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

RIGHT OF WAY

The private right of way must not be reduced, restricted or impeded in any way, and all beneficiaries must have complete and unrestricted access at all times.

You should inform yourself as to your rights and responsibilities in respect to the private right of way particularly reducing, restricting or impeding the right during and after construction.

STRATA AMENDMENT


You will be required to amend strata plan 59085 pursuant to the provisions of the *Strata Titles Act 1998* in order to reflect the completed development works.


FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.

Attachment A: PLN-21-532 - 1/14 LORD STREET SANDY BAY
TAS 7005 - Planning Committee or Delegated
Report ↓ 

Attachment B: PLN-21-532 - 1/14 LORD STREET SANDY BAY
TAS 7005 - CPC Agenda Documents ↓ 

**APPLICATION UNDER HOBART INTERIM PLANNING SCHEME 2015**

Type of Report: Committee
Committee: 24 January 2022
Expiry Date: 3 February 2022
Application No: PLN-21-532
Address: 1 / 14 LORD STREET , SANDY BAY
2 / 14 LORD STREET , SANDY BAY
12 LORD STREET , SANDY BAY
Applicant: Michael Carlotto (1 Plus 2 Architecture Pty. Ltd.)
27 Melville Street
Proposal: Partial Demolition, Alterations, Extension, and Two Multiple Dwellings (Two Existing and Two Proposed)
Representations: Six (Five objecting; One supporting)
Performance criteria: Development Standards; Parking and Access Code; Historic Heritage Code

1. Executive Summary

- 1.1 Planning approval is sought for Partial Demolition, Alterations, Extension, and Two Multiple Dwellings (Two Existing and Two Proposed), at 1/14 Lord Street, 2/14 Lord Street and 12 Lord Street.

- 1.2 More specifically the proposal includes:
- Demolition of the existing dwelling and carport at the rear of the site.
 - Construction of a new double garage associated with the larger dwelling at the front of the site. The proposed garage would have an area of 65m² and a height of 2.7m with a boundary parapet wall with a maximum height of 3.2m.
 - A rooftop garden would be sited on the garage, with vegetation on the east and west sides and a 1m high balustrade around a 20m² accessible terrace in the centre.
 - A new dwelling at the rear of the site. The dwelling would have a maximum height of 5.8m with a ground floor area of 46.5m², and an upper floor area, including void and windows, of 39m².
 - The new dwelling would be two storey with the living areas on the ground floor and one bedroom on the upper level.
 - One car parking space would be allocated to the new dwelling under a carport sited to the east of the dwelling.
- 1.3 The proposal relies on performance criteria to satisfy the following standards and codes:
- 1.3.1 Inner Residential Zone - Building Envelope, Site Coverage and Private Open Space
 - 1.3.2 Parking and Access Code -Vehicle Passing
 - 1.3.3 Historic Heritage Code - Heritage Precinct and Heritage Place
- 1.4 Six (6) representations (5 objecting and 1 supporting) for the proposal were received within the statutory advertising period between 30 November 2021 and 14 December 2021.
- 1.5 The proposal is recommended for approval subject to conditions.
- 1.6 The final decision is delegated to the Council's City Planning Committee, because there were 5 representations objecting to the proposal.

2. Site Detail

- 2.1 The subject site is located on the northern side of Lord Street, between Grosvenor Street and Sandy Bay Road. The site consists of three strata titled lots known as 12, 14a and 14b Lord Street. The proposed development would be sited within the boundaries of the titles at 14a (also known as 1/14) and 14b (also known as 2/14) Lord Street. However, access to the site, and the proposed new car parking at the rear, would be partially over the adjoining lot at 12 York Street. There is also a third lot sited between these two lots, however, this lot has no title or owner. 14a Lord Street contains the larger, two storey dwelling at the front of the site. 14b Lord Street contains the smaller dwelling at the rear of the site.

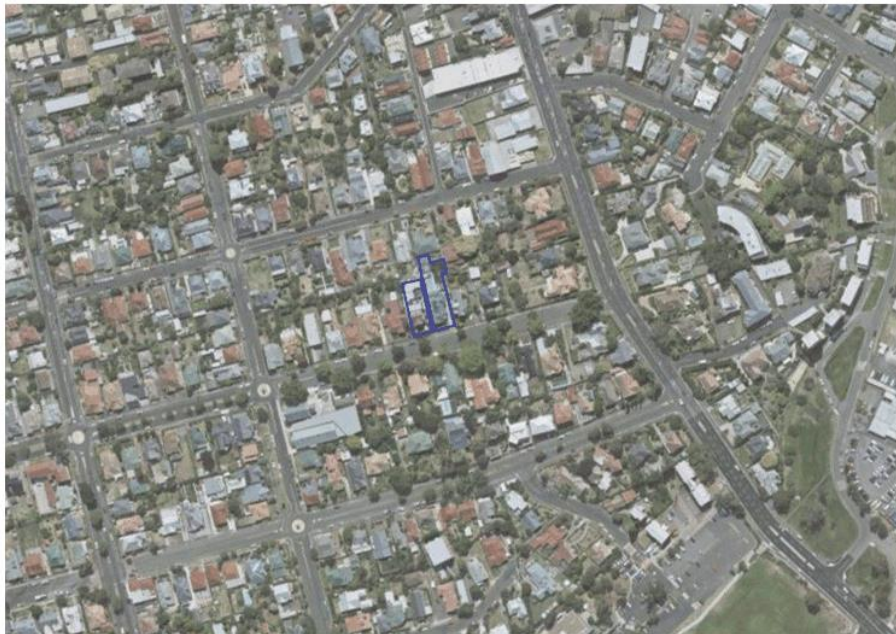


Figure 1: Location of the subject site.



Figure 2: Aerial image of the subject site. The proposed works would be sited on 14a and 14b Lord Street, and access would be partially over 12 Lord Street and a shared driveway with no title (red highlight).(outlined in blue).

- 2.2 A site visit was conducted to 14 Lord Street on 11 January 2022 at 10am.



Photo 1: View of 14a (left) and 12 (right) Lord Street looking north from Lord Street



Photo 2: View of 14b Lord Street looking west from shared driveway.



Photo 3: View of carport at 14 Lord Street (left) and rear yard at 12 Lord Street (right) looking northeast from first floor bedroom at 14a Lord St.



Photo 4: View of roof at 14b Lord Street (right) and rear yard at 16 Lord Street (left) looking northwest from first floor bedroom at 14a Lord St.

3. Proposal

- 3.1 Planning approval is sought for Partial Demolition, Alterations, Extension, and Two Multiple Dwellings (Two Existing and Two Proposed), at 1/14 Lord Street, 2/14 Lord Street and 12 Lord Street.

3.2 More specifically the proposal is for:

- Demolition of the existing dwelling and carport at the rear of the site.
- Construction of a new double garage associated with the larger dwelling at the front of the site. The proposed garage would have an area of 65m² and a height of 2.7m with a boundary parapet wall with a maximum height of 3.2m.
- A rooftop garden would be sited on the garage, with vegetation on the east and west sides and a 1m high balustrade around a 20m² accessible terrace in the centre.
- A new dwelling at the rear of the site. The dwelling would have a maximum height of 5.8m with a ground floor area of 46.5m², and an upper floor area, including void and windows, of 39m².
- The new dwelling would be two storey with the living areas on the ground floor and one bedroom on the upper level.
- One car parking space would be allocated to the new dwelling under a carport sited to the east of the dwelling.

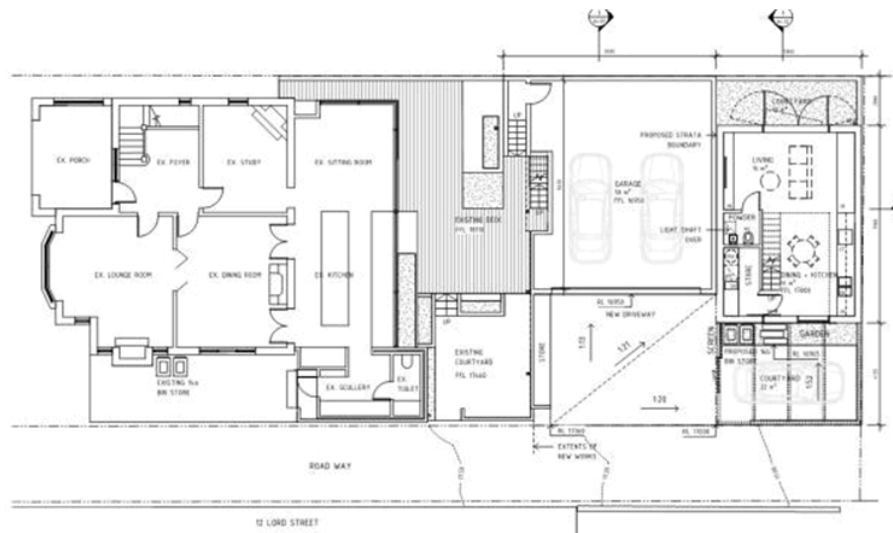


Figure 3: Ground floor plan of the proposed garage and dwelling.

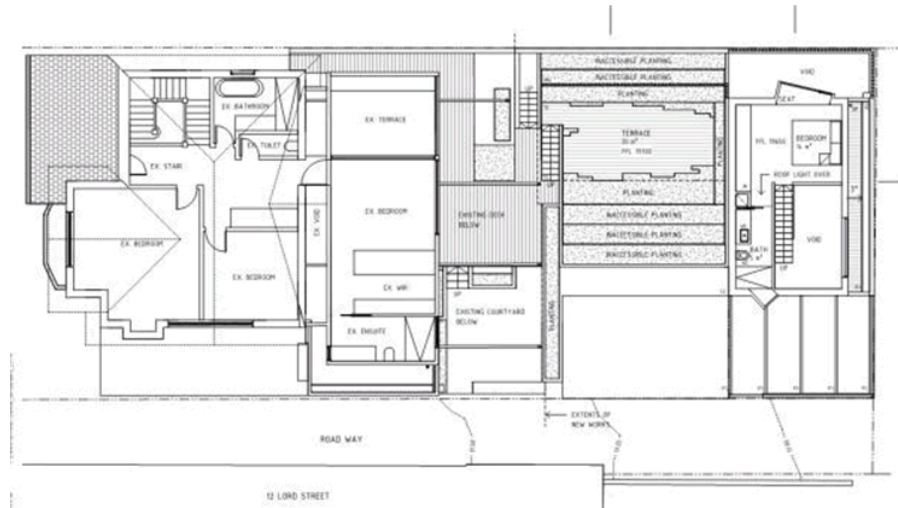


Figure 4: First floor plan of the proposed garage and dwelling.

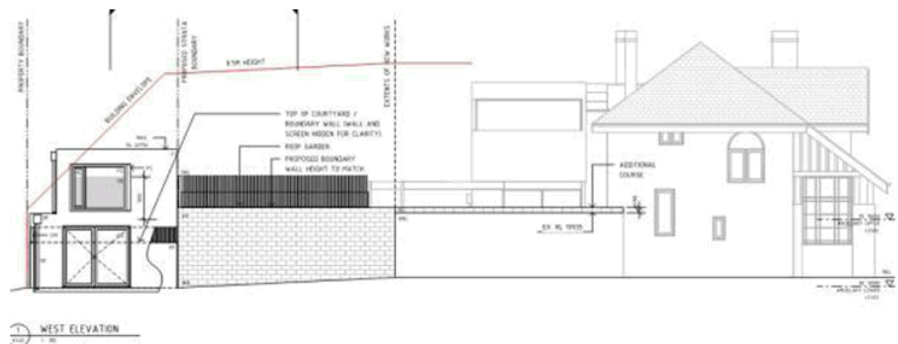


Figure 5: West elevation plan of the proposed garage and dwelling.

4. Background

- 4.1 The applicant has provided confirmation via email dated 14 December 2021 that no development is proposed on 11 Duke Street as part of this application. However, the ground floor drainage plan (Aldanmark Consulting Engineers drawing sheet H2.01 - revision B) indicates that replacement of a section of earthenware stormwater pipe may extend from 14b Lord Street into 11 Duke Street. The pipe has been inspected as part of this application and is said to be in good working order. Therefore, to clarify the scope of any planning permit granted, it is recommended that a condition be included to confirm that no works are approved on 11 Duke Street as part of this application.

- 4.2 The applicant has been advised that the owners of 12 Lord Street, which forms part of this application, are disputing that notification pursuant to Section 52 of the *Land Use Planning and Approvals Act 1993* has occurred. The application documents include an email record detailing the notification.
- 4.3 Extensions to the dwelling at 14a Lord Street were approved in 2017 (PLN-16-00570-01) and have been constructed.

5. Concerns raised by representors

- 5.1 Six (6) representations were received within the statutory advertising period between 30 November 2021 and 14 December 2021. Five (5) representations from three households and/or their representatives objected to the proposal. One (1) representation was in support of the proposal.
- 5.2 The following table outlines the concerns raised in the representations received. Those concerns which relate to a discretion invoked by the proposal are addressed in Section 6 of this report.

Amenity
Any suggestion that the development has been sited and designed with consideration of adjoining properties is disingenuous. The proposal is effectively asking neighbours to sacrifice the quiet enjoyment of their properties for a non-compliant building.
The proposal will result in an unreasonable loss of amenity to adjoining properties due to the visual impact and lack of separation between dwellings.
Privacy
The proposal, in particular the roof top terrace, will unreasonably impact on the privacy of adjoining properties by direct overlooking. The screen to this terrace is inadequate and will add to negative visual impacts.
[planner note: a condition is recommended for any planning permit granted to ensure that privacy screening be designed and constructed to meet the acceptable solution at clause 11.4.6 A1.]

Overshadowing

The proposal will result in an unreasonable amount of overshadowing impacting on habitable rooms and private open space of adjoining properties.

Visual impact

The height of the new dwelling will result in unreasonable visual impact when viewed from adjoining properties.

A two storey dwelling at 14b Lord Street is not supported as it blocks views.

Use

The proposal appears to include storage for business, which is prohibited in the zone.

The proposed dwelling at 14b is likely to be proposed at some point as visitor accommodation, which will involve further traffic and privacy issues.

[planner note: the proposal is for multiple dwellings, a residential use. No visitor accommodation or commercial/business storage is proposed. Any storage on site will need to be associated with residential use.]

Site Coverage

There is too much development on this property given its size. It is a gross overdevelopment of the site.

Private Open Space

The new dwelling at 14b Lord Street is not provided with sufficient private open space to meet the needs of the future occupants. This private open space will also not receive adequate sunlight access.

Invalid Application

The applicant has failed to notify all owners of the intension to lodge this application pursuant to Section 52 of the *Land Use Planning and Approvals Act 1993*.

[planner note: the application documents include email correspondence of the notification pursuant to s52. By proceeding with the Council's online application lodgement process, the applicant has also declared that such notification has occurred.]

Prior Approval

In early 2000, an approval for a two storey dwelling at 14b Lord Street was challenged, with a negotiated outcome (the existing dwelling) reached by way of mediation with the developer. This should occur again.

Parking and Access

The double garage and carport will increase traffic on the shared right of way, which has no opportunity for vehicle passing and no dedicated pedestrian access. The original right of way served less properties and the intensification of use will have an unreasonable impact on safety and amenity.

Heritage

The proposal has ignored the local heritage precinct overlay and focuses entirely on the State heritage listing with no consideration to streetscape and townscape. The degree of visibility of the new dwelling at 14b Lord Street will detrimentally impact on the very intact streetscape of Lord Street.

The proposal will further deviate from the original subdivision pattern that forms part of the significance of the heritage precinct.

Supported

The recently completed extension to the dwelling at 14a Lord Street, a collaboration between the same owner, builder and architect as the current proposal, has won awards and praise. If permitted to go ahead, the proposal will again result in a beautiful piece of considerate, contemporary architecture.

The needs of the adjoining properties have been considered in the design and the proposal is supported.

6. Assessment

- 6.1 The *Hobart Interim Planning Scheme 2015* is a performance based planning scheme. To meet an applicable standard, a proposal must demonstrate compliance with either an acceptable solution or a performance criterion. Where a proposal complies with a standard by relying on one or more performance criteria, the Council may approve or refuse the proposal on that basis. The ability to approve or refuse the proposal relates only to the performance criteria relied on.
- 6.2 The site is located within the inner Residential Zone of the *Hobart Interim Planning Scheme 2015*.
- 6.3 The existing and proposed use is residential for multiple dwellings, which is a permitted use in the zone.
- 6.4 The proposal has been assessed against:
 - 6.4.1 Part D - 11 Inner Residential Zone
 - 6.4.2 E6.0 Parking and Access Code
 - 6.4.3 E7.0 Stormwater Management Code
 - 6.4.4 E13.0 Historic Heritage Code
- 6.5 The proposal relies on the following performance criteria to comply with the applicable standards:
 - 6.5.1 Inner Residential Zone:
 - Setback and Building Envelope – Part D 11.4.2 P3*

Site Coverage and Private Open Space - Part D 11.4.3 P1: P2

6.5.2 Parking and Access Code:

Vehicle Passing - E6.7.3 P1

6.5.3 Historic Heritage Code:

Demolition on a Listed Place in a Listed Precinct - E13.7.1 P1 and E13.8.1 P1

Building and Works on a Listed Place in a Listed Precinct - E13.7.2 P1: P2: P3 and E13.8.2 P1.

6.6 Each performance criterion is assessed below.

6.7 Setback and Building Envelope - Part D 11.4.2 P3

6.7.1 The acceptable solution at clause 11.4.2.A3 requires buildings to be sited within the prescribed building envelope, which includes a maximum height of 3m at a side and rear boundary, increasing at an angle of 45 degrees to a maximum height of 9.5m.

6.7.2 The proposal includes buildings that would not comply with the prescribed building envelope. A second storey bedroom that is proposed at 5.5m in height which falls party outside the envelope near the rear boundary.

6.7.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.7.4 The performance criterion at clause 11.4.2.P3 provides as follows:

The siting and scale of a dwelling must:

(a) not cause an unreasonable loss of amenity to adjoining properties, having regard to:

(i) reduction in sunlight to a habitable room (other than a bedroom) of a dwelling on an adjoining property;

(ii) overshadowing the private open space of a dwelling on an adjoining property;

(iii) overshadowing of an adjoining vacant property; or

(iv) visual impacts caused by the apparent scale, bulk or proportions of the dwelling when viewed from an adjoining property; and

(b) provide separation between dwellings on adjoining properties that is consistent with that existing on established properties in the area.

6.7.5 Adjoining properties

Adjoining properties for the purposes of this assessment are considered to be 16 Lord Street (west of proposal), 12 Lord Street (east of proposal), 13 Duke Street (northwest of proposal), and 11 Duke Street (north of proposal).

Overshadowing

Shadow diagrams and solar access diagrams have been submitted in support of the proposal. The diagrams show the extent of overshadowing caused by the proposal between 9am and 3pm during solstice and equinox periods. The diagrams also present a comparison of the proposal against the existing shadows and shadows cast by a theoretical building built to comply with the prescribed building envelope.

The submitted documents demonstrate that the proposal will not result in any overshadowing impact to the adjoining dwellings or private open space at 11 Duke Street, 13 Duke Street, and 12 Lord Street throughout the year between the hours of 9am-3pm. Overshadowing impact on 16 Lord Street is confined to early morning periods (around 9am). That is, the proposal will not reduce direct sunlight access to the dwelling and private open space of 16 Lord Street below 3 hours per day during the winter solstice, which is generally considered to meet the test of reasonableness. In addition, the early morning overshadowing resulting from the proposal is less than what would theoretically be possible under the prescribed building envelope.

Visual Impact

When viewed from the adjoining properties, the proposal will be compatible with the existing development on the site, and will appear similar in scale and bulk. Parts of the privacy screening and landscaping on the rooftop terrace above the garage will be visible from some adjoining properties, as will parts of the second storey bedroom to the

new dwelling. The scale of the additions are relatively modest, at a maximum height of 5.5m, but predominantly around 3 to 4m.

The second storey bedroom will be setback from property boundaries and, when viewed from adjoining properties, will be partly obscured by existing boundary walls and/or softened by vegetation in a similar manner to the existing dwelling.

A new one bedroom dwelling will replace an existing two bedroom dwelling at 14b Lord Street. In general terms, when viewed from adjoining properties, the reduction in the overall footprint of this dwelling enables the dwelling at 14b to be read as ancillary to, or an outbuilding of, the existing dwelling at 14a. There is also a sufficient degree of separation between the second storey building elements to reduce the apparent bulk of the proposal when viewed in context of adjoining properties.

Separation Distance

Numerous properties in the area, including 13 Duke St, 15 Duke St, 12 Lord St, 14a Lord St, 14b Lord St, and 16 Lord St, include dwellings or building elements built on or close to property boundaries. As a result, separation distance between adjoining dwellings in the area is highly variable. Broadly speaking, separation between existing dwellings ranges from around 1m (e.g. between 18 and 20 Lord St) to more than 20m (e.g. between 16 Lord St and 13 Duke St).

The proposal provides for separation between adjoining dwellings that is consistent with that prevailing in the surround area. The existing separation distances to adjoining properties will be retained.

In summary, the proposal presents minimal overshadowing impact, modest visual impact, and consistent separation distances.

6.7.6 The proposal complies with the performance criterion.

6.8 Site Coverage - Part D 11.4.3.P1

6.8.1 The acceptable solution at clause 11.4.3.A1(b) requires multiple dwellings to have a total area of private open space of not less than 40m² per dwelling.

6.8.2 The proposal includes an area of 15m² of private open space for the dwelling at the rear of the site.

6.8.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.8.4 The performance criterion at clause 11.4.3.P1 provides as follows:

Dwellings must have:

a) site coverage consistent with that existing on established properties in the area;

b) private open space that is of a size and dimensions appropriate for the size of the dwelling and is able to accommodate:

i) outdoor recreational space consistent with the projected requirements of the occupants and, for multiple dwellings, take into account any common open space provided for this purpose within the development; and

ii) operational needs, such as clothes drying and storage; and

c) reasonable space for the planting of gardens and landscaping.

6.8.5 The proposal will result in a site coverage that is less than 65%, which meets the corresponding acceptable solution.

The private open space available to 14a Lord Street will be increased by the proposal through the addition of the rooftop terrace area above the garage. This meets the corresponding acceptable solution.

The one bedroom dwelling proposed at 14b is to be provided with a 10m² courtyard that functions as their primary private open space. Additional open space in the form of a small garden bed is also available, and the uncovered car space is to be screened in a manner that it could function as another temporary open space area. The primary open space for 14b is directly accessible from the living area, and is north facing. Direct sunlight access may be reduced in mid winter periods, however, this is not dissimilar in nature and size to the private open space of other one bedroom multiple dwellings in the Hobart area. The projected private open space requirements of occupants of one bedroom dwellings is markedly different to larger family homes with multiple bedrooms. One bedroom dwellings typically accommodate one or two person households without children, who leverage off nearby public open space areas for

outdoor recreation needs. In this instance, the site is less than 400m from open space areas, including at Marievilla Esplanade.

Broadly speaking, there is sufficient private open space available at 14b to serve the likely needs of future occupants, such as clothes drying, storage and gardening.

6.8.6 The proposal complies with the performance criterion.

6.9 Private Open Space - Part D11.4.3.P2

6.9.1 The acceptable solution at clause 11.4.3.A2 requires a dwelling to have an area of private open space that is at least 24m² and has a minimum dimension of 4m.

6.9.2 The proposal includes an area of private open space for the rear dwelling that would have an area of 10m² and a minimum dimension, excluding the courtyard wall, of 1.8m.

6.9.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.9.4 The performance criterion at clause 11.4.3.P2 provides as follows:

A dwelling must have private open space that includes an area capable of serving as an extension of the dwelling for outdoor relaxation, dining, entertaining and children's play and that is:

a) conveniently located in relation to a living area of the dwelling; and

b) oriented to take advantage of sunlight.

6.9.5 The one bedroom dwelling proposed at 14b is to be provided with a 10m² courtyard that functions as their primary private open space. Additional open space in the form of a small garden bed is also available, and the uncovered car space is to be screened in a manner that it could function as another temporary open space area. The primary open space for 14b is directly accessible from the living area, and is north facing. Direct sunlight access may be reduced in mid winter periods, however, this is not dissimilar in nature and size to private open space of other one bedroom multiple dwellings in the Hobart area. There is considered to be sufficient private outdoor space available to the dwelling at 14b, and a primary private open space area that is capable of serving as an

extension to the dwelling to meets the likely needs of future occupants.

6.9.6 The proposal complies with the performance criterion.

6.10 Vehicle Passing - E6.7.3 P1

6.10.1 The acceptable solution at clause E6.7.3 A1 requires a passing bay as the driveway is longer than 30m.

6.10.2 The proposal does not include a passing bay for the driveway.

6.10.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.10.4 The performance criterion at clause E6.7.3 P1 provides as follows:

Vehicular passing areas must be provided in sufficient number, dimension and siting so that the access is safe, efficient and convenient, having regard to all of the following:

(a) avoidance of conflicts between users including vehicles, cyclists and pedestrians;

(b) avoidance of unreasonable interference with the flow of traffic on adjoining roads;

(c) suitability for the type and volume of traffic likely to be generated by the use or development;

(d) ease of accessibility and recognition for users.

6.10.5 The application has been referred to Council's Development Engineering Officer, who has concluded that, given the existing driveway configuration and low traffic volumes, the proposed parking and access arrangements are acceptable. Considering that the existing two bedroom dwelling at 14b is to be replaced with a one bedroom dwelling, parking and access will likely be improved as a result of the proposal.

6.10.6 The proposal complies with the performance criterion.

6.11 Demolition on a Listed Place in a Heritage Precinct - E13.7.1 P1 and E13.8.1 P1

6.11.1 There is no acceptable solution for clause E13.7.1 A1 and E13.8.1 A1.

- 6.11.2 The proposal includes demolition.
- 6.11.3 There is no acceptable solution; therefore assessment against the performance criterion is relied on.
- 6.11.4 The performance criterion at clause E13.7.1 P1 and E13.8.1 P1 provides as follows:

E13.7.1 P1

Demolition must not result in the loss of significant fabric, form, items, outbuildings or landscape elements that contribute to the historic cultural heritage significance of the place unless all of the following are satisfied;

(a) there are, environmental, social, economic or safety reasons of greater value to the community than the historic cultural heritage values of the place;

(b) there are no prudent and feasible alternatives;

(c) important structural or façade elements that can feasibly be retained and reused in a new structure, are to be retained;

(d) significant fabric is documented before demolition.

E13.8.1 P1

Demolition must not result in the loss of any of the following:

(a) buildings or works that contribute to the historic cultural heritage significance of the precinct;

*(b) fabric or landscape elements, including plants, trees, fences, paths, outbuildings and other items, that contribute to the historic cultural heritage significance of the precinct;
unless all of the following apply;*

(i) there are, environmental, social, economic or safety reasons of greater value to the community than the historic cultural heritage values of the place;

(ii) there are no prudent or feasible alternatives;

(iii) opportunity is created for a replacement building that will be more complementary to the heritage values of the precinct.

- 6.11.5 The application has been referred to Council's Senior Cultural Heritage Officer, who has determined that the proposed demolition involved the removal of a 1980s era flat at the rear of the site which is not fabric of heritage significance to the place or precinct. Therefore, the proposal will not result in the loss through demolition of heritage values to the place or precinct.
- 6.11.6 The proposal complies with the performance criterion.
- 6.12 Buildings and Works on a Listed Place in a Heritage Precinct - E13.7.2 P1: P2: P3 & E13.8.2 P1
- 6.12.1 There is no acceptable solution for clause E13.7.2 A1: A2: A3 and clause E13.8.2 A1
- 6.12.2 The proposal includes buildings and works.
- 6.12.3 There is no acceptable solution; therefore assessment against the performance criterion is relied on.
- 6.12.4 The performance criterion at clause E13.7.2 P1: P2: P3 & E13.8.2 P1 provides as follows:

E13.7.2 P1

Development must not result in any of the following:

(a) loss of historic cultural heritage significance to the place through incompatible design, including in height, scale, bulk, form, fenestration, siting, materials, colours and finishes;

(b) substantial diminution of the historic cultural heritage significance of the place through loss of significant streetscape elements including plants, trees, fences, walls, paths, outbuildings and other items that contribute to the significance of the place.

E13.7.2 P2

Development must be designed to be subservient and complementary to the place through characteristics including:

- (a) scale and bulk, materials, built form and fenestration;*
- (b) setback from frontage;*
- (c) siting with respect to buildings, structures and listed elements;*
- (d) using less dominant materials and colours.*

E13.7.2 P3

Materials, built form and fenestration must respond to the dominant heritage characteristics of the place, but any new fabric should be readily identifiable as such.

E13.8.2 P1

Design and siting of buildings and works must not result in detriment to the historic cultural heritage significance of the precinct, as listed in Table E13.2.

- 6.12.5 The application has been referred to Council's Senior Cultural Heritage Officer, who has provided the following assessment.

In terms of the heritage precinct, the proposal needs to be considered in relation to the impact on the streetscape (as defined by the Scheme) and whether detriment to the heritage values of the precinct will ensue. Given that the rear extension of the front house currently obscures the existing rear strata unit, and although the proposed new unit will be higher than the existing and have a second storey, it will not be dominant or visible from the streetscape when viewed up the existing driveway/right of way or between the subject site and 16 Lord Street. In this regard the proposal satisfies E13.8.2 P1.

In terms of the new proposal in relation to the heritage listed place, the proposed new unit is from the same stable of work as the designer of the extension to the heritage listed house and therefore is of a similar material, colour and texture palette. Largely single storey, the double garage has a roof top garden while the unit has a smaller second storey and is located toward the rear of the block. It can be considered to be subservient in height, scale and form to the main heritage listed building

and its extension, is readily identifiable as a new element and is not incompatible with the design of the extension to the existing house. In this regard the proposal satisfies E13.7.2 P1: P2: & P3.

6.12.6 The proposal complies with the performance criterion.

7. Discussion

- 7.1 Planning approval is sought for Partial Demolition, Alterations, Extension, and Two Multiple Dwellings (Two Existing and Two Proposed), at 1/14 Lord Street, 2/14 Lord Street and 12 Lord Street.
- 7.2 The application was advertised and received six representations (5 objecting). The representations raised concerns regarding amenity, privacy, overshadowing, visual impact, use, site coverage, private open space, validity, parking and heritage.
- 7.3 The proposal has been assessed against the relevant provisions of the planning scheme and is considered to perform well.
- 7.4 The proposal has been assessed by other Council officers, including the Council's Development Engineer, Cultural Heritage Officer, Surveyor, Environmental Health Officer and Stormwater Engineer. The officers have raised no objection to the proposal, subject to conditions.
- 7.5 The proposal is recommended for approval.

8. Conclusion

- 8.1 The proposed Partial Demolition, Alterations, Extension, and Two Multiple Dwellings (Two Existing and Two Proposed), at 1/14 Lord Street, 2/14 Lord Street and 12 Lord Street satisfies the relevant provisions of the *Hobart Interim Planning Scheme 2015*, and as such is recommended for approval.

9. Recommendations

That: Pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for Partial Demolition, Alterations, Extension, and Two Multiple Dwellings (Two Existing and Two Proposed), at 1/14 Lord Street, 2/14 Lord Street and 12 Lord Street for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-21-532 - 1/14 LORD STREET SANDY BAY TAS 7005 - Final Planning Documents, except where modified below.

Reason for condition

To clarify the scope of the permit.

TW

The use and/or development must comply with the requirements of TasWater as detailed in the form Submission to Planning Authority Notice, Reference No. TWDA 2021/01404-HCC dated 23 November 2021 as attached to the permit.

Reason for condition

To clarify the scope of the permit.

PLN 1

Screening to a height of 1.7m above the finished floor level, with no more than 25% uniform transparency, must be installed and maintained along the western edge of the terrace above the garage prior to first occupation.

Reason for condition

To provide reasonable opportunity for privacy for dwellings.

PLN s1

No works are approved on 11 Duke Street as part of this planning permit.

Reason for condition

To clarify the scope of the permit.

ENG sw1

All stormwater from the proposed development (including but not limited to: roofed areas, ag drains, and impervious surfaces such as driveways and paved areas) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

ENG 3a

The access driveway, and parking module (parking spaces, aisles and manoeuvring area) must be designed and constructed in accordance with Australian Standard AS/NZS2890.1:2004 (including the requirement for vehicle safety barriers where required), or a Council approved alternate design certified by a suitably qualified engineer to provide a safe and efficient access, and enable safe, easy and efficient use.

Advice: It is advised that designers consider the detailed design of the access and parking module prior to finalising the Finished Floor Level (FFL) of the parking spaces (especially if located within a garage incorporated into the dwelling), as failure to do so may result in difficulty complying with this condition.

Reason for condition

To ensure the safety of users of the access and parking module, and compliance with the relevant Australian Standard.

ENG 4

The access driveway and parking module (car parking spaces, aisles and

manoeuvring area) approved by this permit must be constructed to a sealed standard (spray seal, asphalt, concrete, pavers or equivalent Council approved) and surface drained to the Council's stormwater infrastructure prior to the commencement of use.

Reason for condition

To ensure the safety of users of the access driveway and parking module, and that it does not detract from the amenity of users, adjoining occupiers or the environment by preventing dust, mud and sediment transport.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. **Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or**
2. **Be repaired and reinstated by the owner to the satisfaction of the Council.**

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENV 1

Sediment and erosion control measures sufficient to prevent sediment from leaving the site must be installed prior to any disturbance of the site, and

maintained until all areas of disturbance have been stabilized or re-vegetated.

Advice: For further guidance in preparing a Soil and Water Management Plan – in accordance with Fact sheet 3 Derwent Estuary Program click [here](#).

Reason for condition

To avoid the sedimentation of roads, drains, natural watercourses, Council land that could be caused by erosion and runoff from the development, and to comply with relevant State legislation.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

STORM WATER

Please note that in addition to a building and/or plumbing permit, development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

RIGHT OF WAY

The private right of way must not be reduced, restricted or impeded in any way, and all beneficiaries must have complete and unrestricted access at all times.

You should inform yourself as to your rights and responsibilities in respect to the private right of way particularly reducing, restricting or impeding the right during and after construction.

STRATA AMENDMENT

You will be required to amend strata plan 59085 pursuant to the provisions of the *Strata Titles Act 1998* in order to reflect the completed development works.

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.



(Mark O'Brien)

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Karen Abey)

Manager Development Appraisal

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Date of Report: 14 January 2022

Attachment(s):

Attachment B - CPC Agenda Documents



12.08.2021
Attention: Planning Officer
City of Hobart
16 Elizabeth Street
Hobart
TAS 7001

To Whom It May Concern,

DEVELOPMENT APPLICATION – ALTERATIONS & ADDITIONS
14a & 14b LORD STREET, SANDY BAY TASMANIA 7005

PID: 5619873 & 5619881
Certificate of Title: 59085/1 & 2

Please find attached application for alterations and additions to 14a & 14b Lord Street,
Sandy Bay 7005.

Included with this letter are the following documents:

AUTHOR	DOCUMENT	DETAIL
1+2 Architecture	Architecture Drawings	A0.00 Cover Sheet
		A1.01 Existing Site Plan
		A1.02 Proposed Site Plan
		A2.01 Lower Level Floor Plan
		A2.02 Upper Level Floor Plan
		A2.03 Roof Plan
		A3.01 Building Elevations
		A3.02 Building Elevations
		A4.01 Building Sections
		A4.02 Building Sections
		A4.03 Building Sections
		A9.01 Vehicle Swept Paths
		A9.02 Shadow Diagrams Winter
		A9.03 Shadow Diagrams Summer
Leary Cox & Cripps	Detailed Land Survey	913701-A2 Detail



The following proposal is for 14a and 14b Lord Street, Sandy Bay:

The existing 2 bedroom dwelling at 14b is proposed to be demolished. The strata boundary between 14a and 14b will be adjusted to suit the proposed works.

14b is proposed to have right of way access over a shared driveway located wholly within 14a.

A 2 car garage with a Roof Garden is proposed for the rear of 14a and will not be visible from Lord Street.

A new 1 bedroom dwelling with 1 car parking is proposed for 14b.

The existing house on 14a is on the Tasmania State Heritage register.

1+2 Architecture have researched the history and heritage significance of the building and have consulted with Russell Dobie from Heritage Tasmania. Below we have addressed how the proposal deals with each of the criteria identified in the Tasmanian Heritage Register data sheet specific to the property (below).

d) The place is important in demonstrating the principal characteristics of a class of place in Tasmania's history.

14 Lord Street is of historic heritage significance because of its ability to demonstrate the principal characteristics of a double storey brick Federation Arts and Crafts domestic building .

f) The place has a strong or special association with a particular community or cultural group for social or spiritual reasons.

This building is of historic heritage significance because of its townscape associations are regarded as important to the community's sense of place.

The design and siting of the proposal at the rear of the property does not impact the prominence of the existing house or the streetscape character of Lord Street.

No significant modifications are proposed to the existing heritage listed house.

The proposed dwelling at 14b projects outside of the building envelope. This only differs to the current conditions at 9am in June. Throughout the rest of the year, the overshadowing is not dissimilar to current conditions imposed by the existing 2 bedroom apartment.

3 +

The upper level of the 2 storey apartment has been setback from the northern boundary to reduce the impacts of overshadowing. Windows to the 2nd storey have been located and orientated to ensure the privacy of No. 12 & 16 Lord Street and No. 11 Duke Street is not compromised.

The terrace component of the Roof Garden is set back from the western boundary to protect the privacy of 16 Lord Street.

Should any further detail or clarifications be required, please contact 1 + 2 Architecture.

Kind regards,

For 1 Plus 2 Architecture Pty. Ltd.



Michael Carlotto

LORD STREET HOUSE ALTERATIONS & ADDITIONS

SITE TITLE REF: 59085/1 & 2
PID: 5619873 & 5619881
SITE ADDRESS: 14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005
LOCAL AUTHORITY: HOBART CITY COUNCIL
PLANNING SCHEME: Hobart Interim Planning Scheme 2015

DRAWING LIST

NO.	NAME	REV.
A0.00	COVER SHEET	B
A101	EXISTING SITE PLAN	B
A102	PROPOSED SITE PLAN	B
A103	EXISTING LOWER LEVEL FLOOR PLAN	A
A201	PROPOSED LOWER LEVEL FLOOR PLAN	B
A202	PROPOSED UPPER LEVEL FLOOR PLAN	B
A203	PROPOSED ROOF PLAN	B
A301	PROPOSED BUILDING ELEVATIONS	B
A302	PROPOSED BUILDING ELEVATIONS	B
A303	EXISTING BUILDING ELEVATIONS	A
A304	EXISTING BUILDING ELEVATIONS	A
A4.01	PROPOSED SECTIONS	B
A4.02	PROPOSED SECTIONS	B
A4.03	PROPOSED SECTIONS	B
A9.01	VEHICLE SWEEP PATHS	A
A9.02	SHADOW DIAGRAMS JUNE	B
A9.03	SHADOW DIAGRAMS DECEMBER	B
A9.04	SHADOW DIAGRAMS MARCH	A
A9.05	SHADOW DIAGRAMS JUNE	A
A9.06	SHADOW DIAGRAMS DECEMBER	A
A9.07	SHADOW DIAGRAMS MARCH	A

NOTES

- EXISTING CONTOUR AND LEVEL INFORMATION HAS BEEN PROVIDED BY LEARY COX & CRIPPS LAND & ENGINEERING SURVEYORS WITH SURVEY INFORMATION POSITIONED ON THE AUSTRALIAN HEIGHT DATUM.

EXISTING LOT 1 SITE COVER

	AREA	PERCENTAGE OF SITE AREA
ROOFED AREA	209.83 m ²	52%
UNCOVERED AREA	193.44 m ²	48%
SITE AREA	403.27 m ²	

EXISTING LOT 2 SITE COVER

	AREA	PERCENTAGE OF SITE AREA
ROOFED AREA	103.58 m ²	82%
UNCOVERED AREA	22.86 m ²	18%
SITE AREA	126.45 m ²	



2 EXISTING SITE COVER
A0.00 1:500

PROPOSED LOT 1 SITE COVER

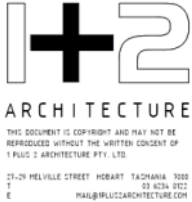
	AREA	PERCENTAGE OF SITE AREA
ROOFED AREA	265.65 m ²	54%
UNCOVERED AREA	226.19 m ²	46%
SITE AREA	491.84 m ²	

PROPOSED LOT 2 SITE COVER

	AREA	PERCENTAGE OF SITE AREA
ROOFED AREA	48.17 m ²	58%
UNCOVERED AREA	34.64 m ²	42%
SITE AREA	82.81 m ²	



1 PROPOSED SITE COVER
A0.00 1:500



COVER SHEET

0 2 m 6 m 10 m



1:500 @ A3

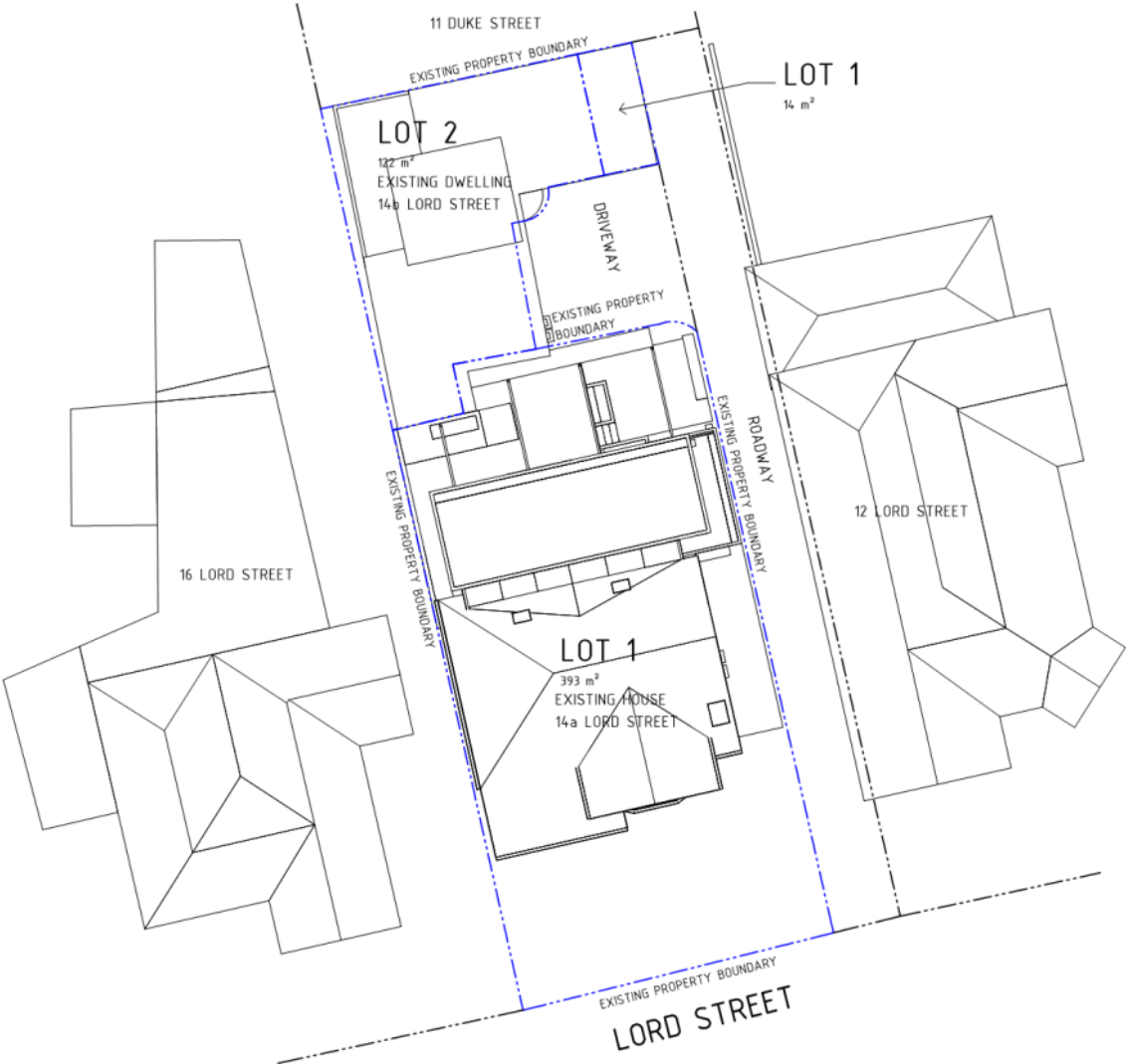
PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

A0.00 B



S:\2016\2016 Lord Street House Alterations + Additions\2016 Lord Street House Alterations + Additions.dwg, 25/01/2022
18/10/2021 14:51:14
plot information

EXISTING SITE PLAN

0 2 m 6 m 10 m

1 : 200 @ A3



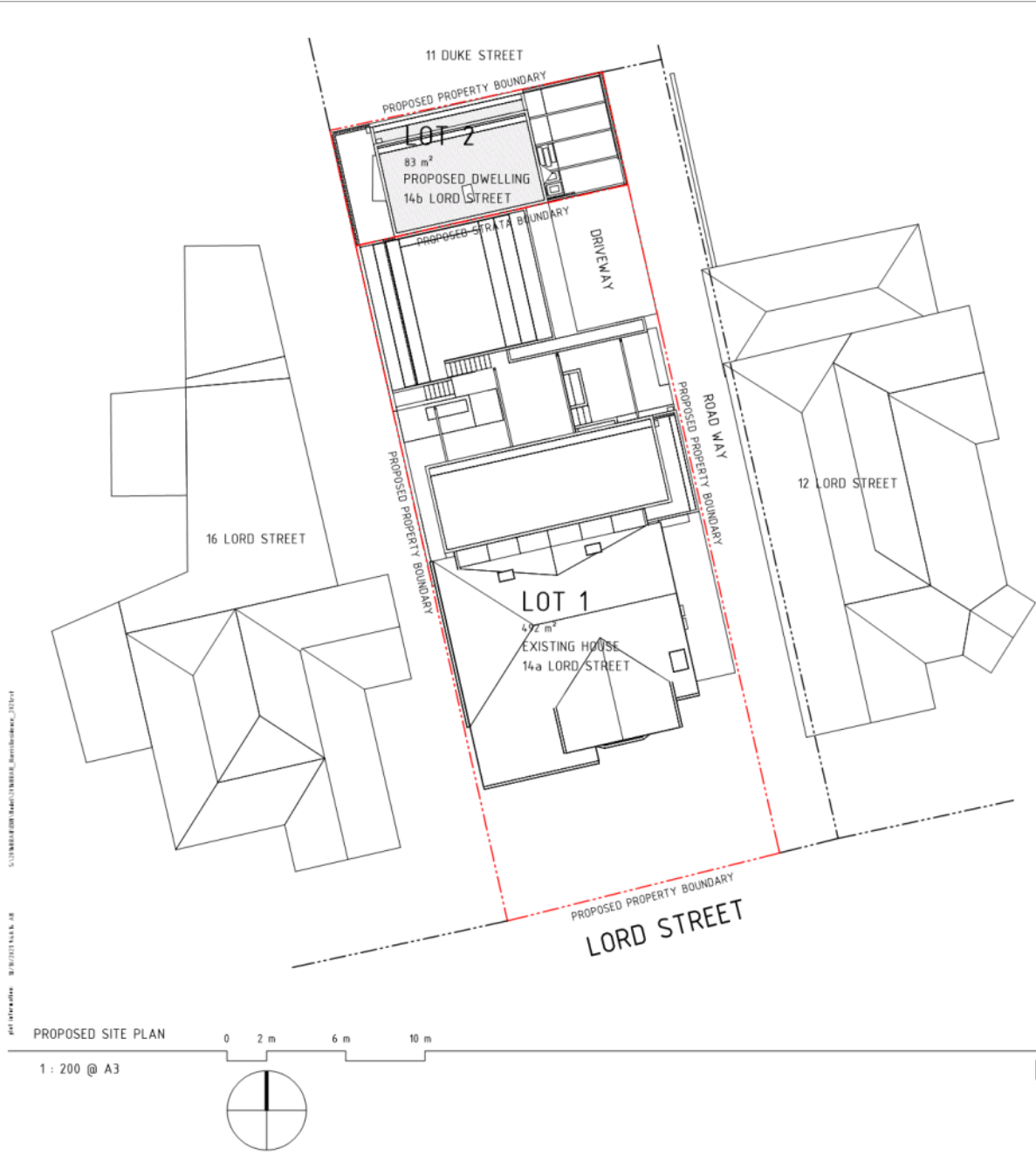
PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016\HRAH 18.10.21

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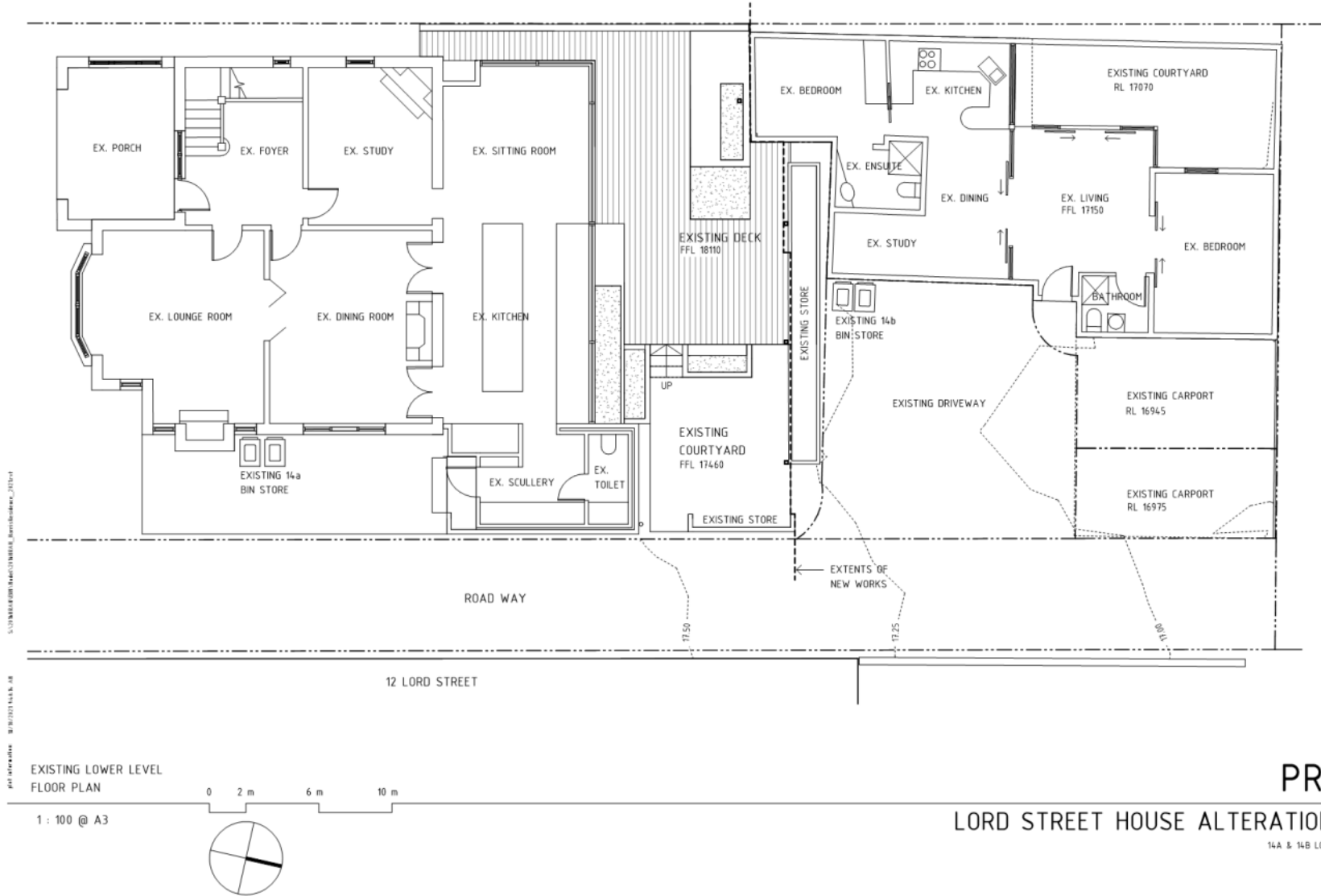
PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

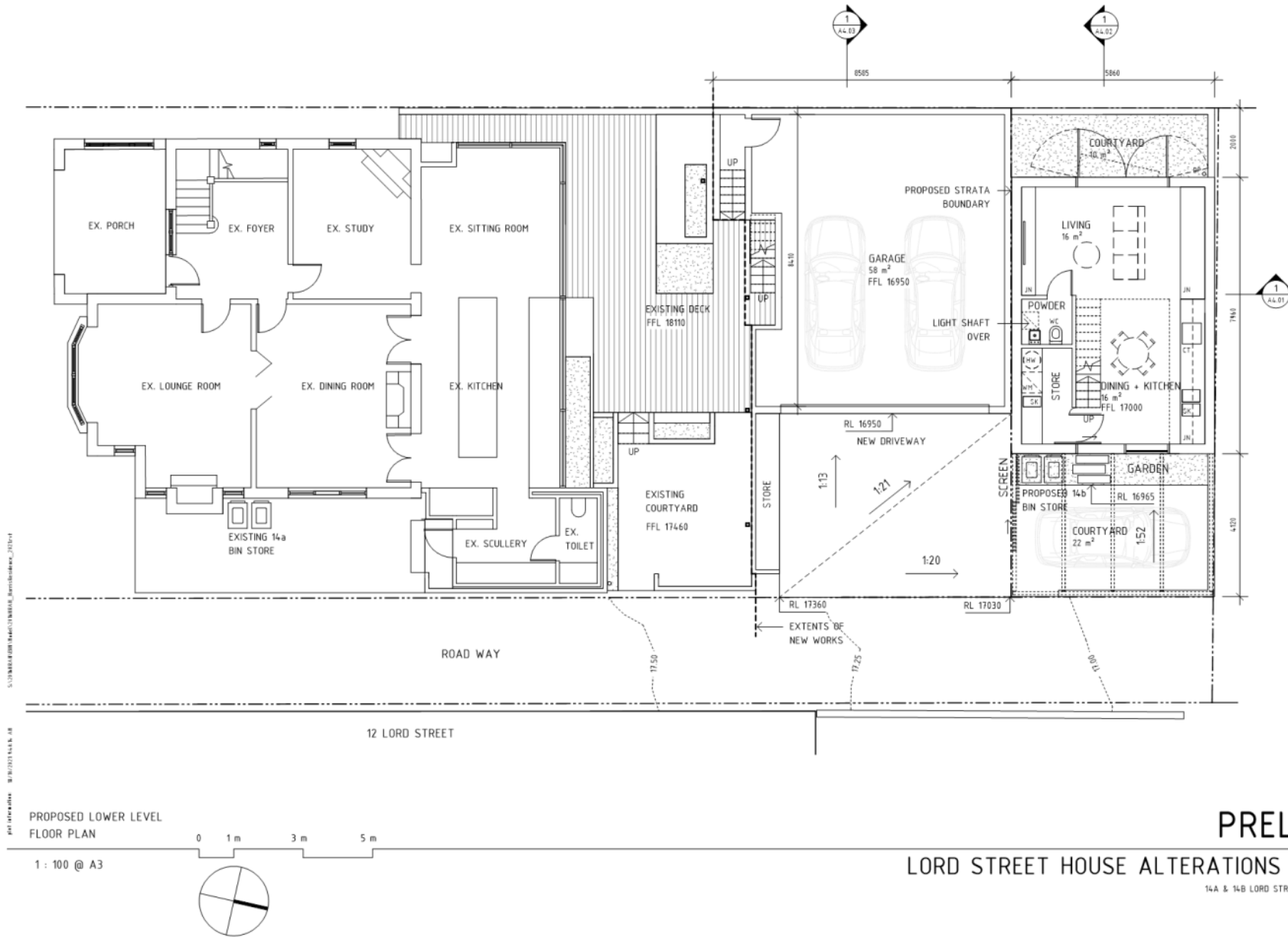
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E MAIL@IPLUS2ARCHITECTURE.COM

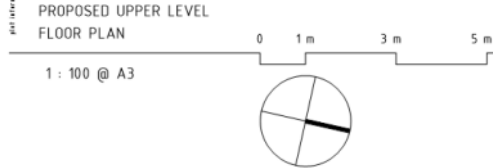
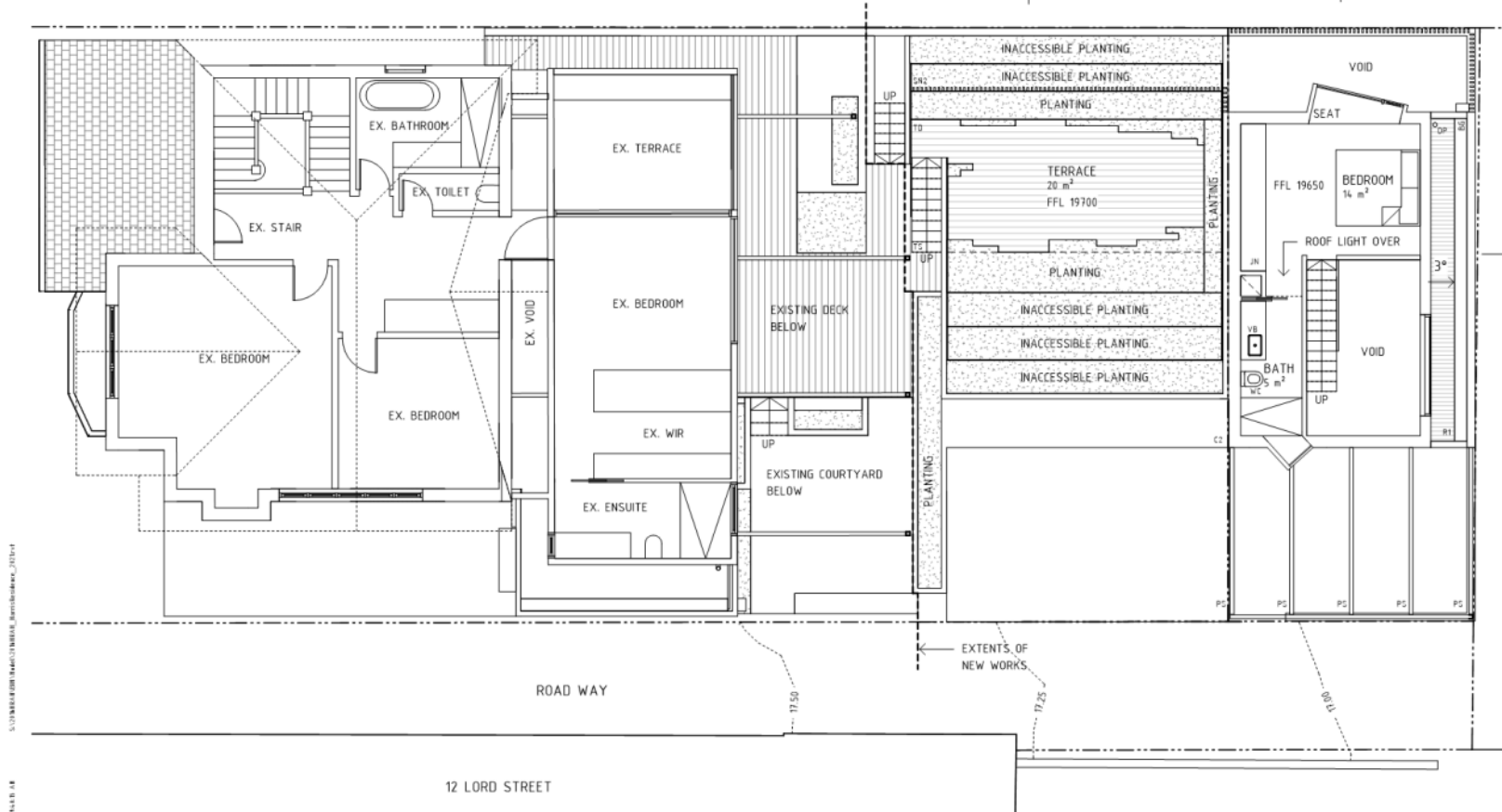
- LEGEND
- CT COOKTOP
 - DP DOWN PIPE
 - HW HARDWOOD
 - JN JOINERY
 - SK SINK
 - WC TOILET SUITE
 - WM WASHING MACHINE





LEGEND

BG	BOX GUTTER
C2	GREY, INSITU CONCRETE
DP	DOWN PIPE
JN	JOINERY
PS	BLACK PAINTED STEELWORK
R1	METAL ROOFING, COLORBOND MONUMENT
SN2	TIMBER BATTEN SCREEN
TD	TIMBER DECKING
TS	TIMBER STAIR TREAD
VB	VANITY BASIN
WC	TOILET SUITE



PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

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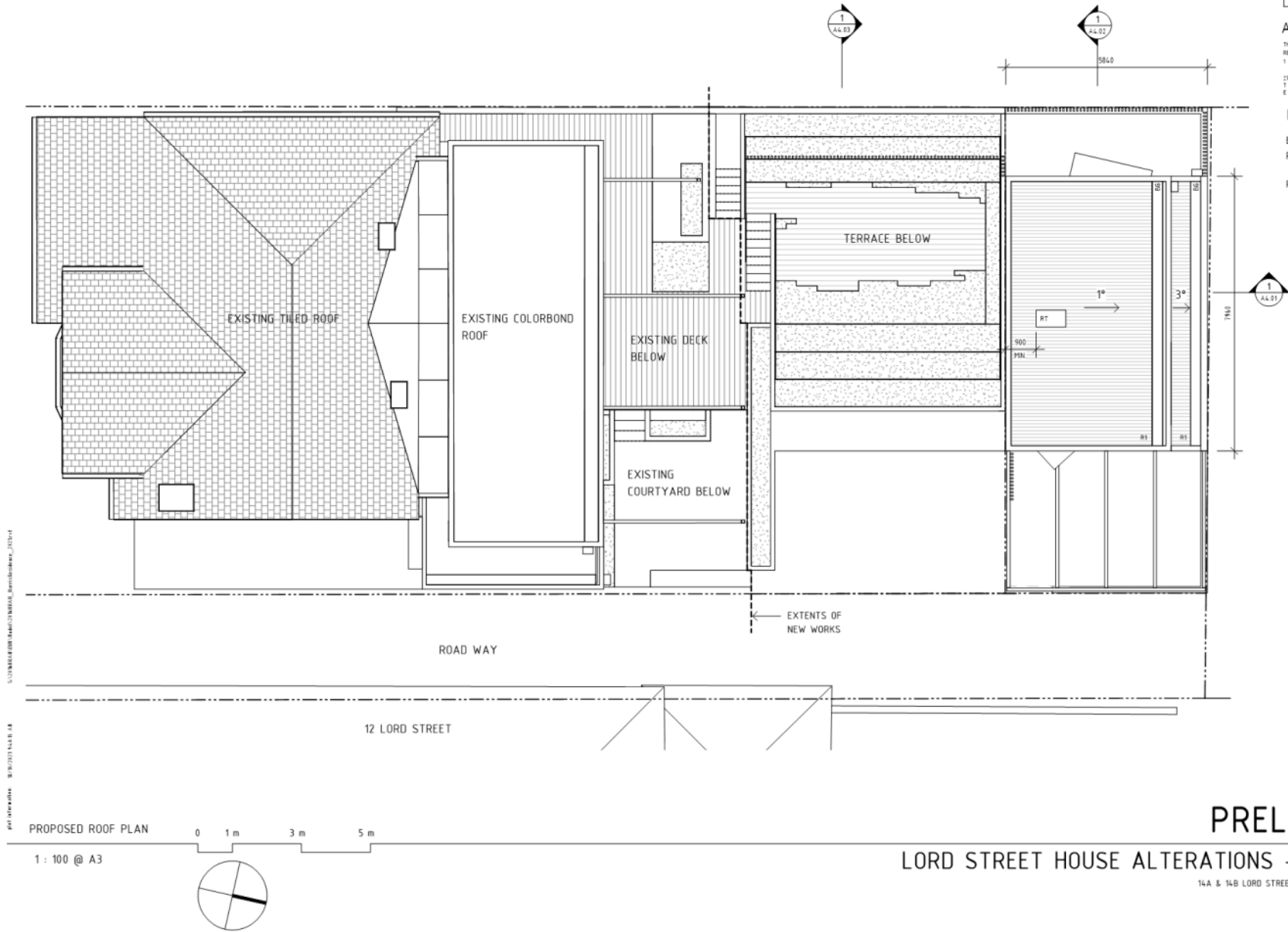
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- LEGEND
- BG BOX GUTTER
 - R1 METAL ROOFING,
COLORBOND MONUMENT
 - RT ROOF LIGHT





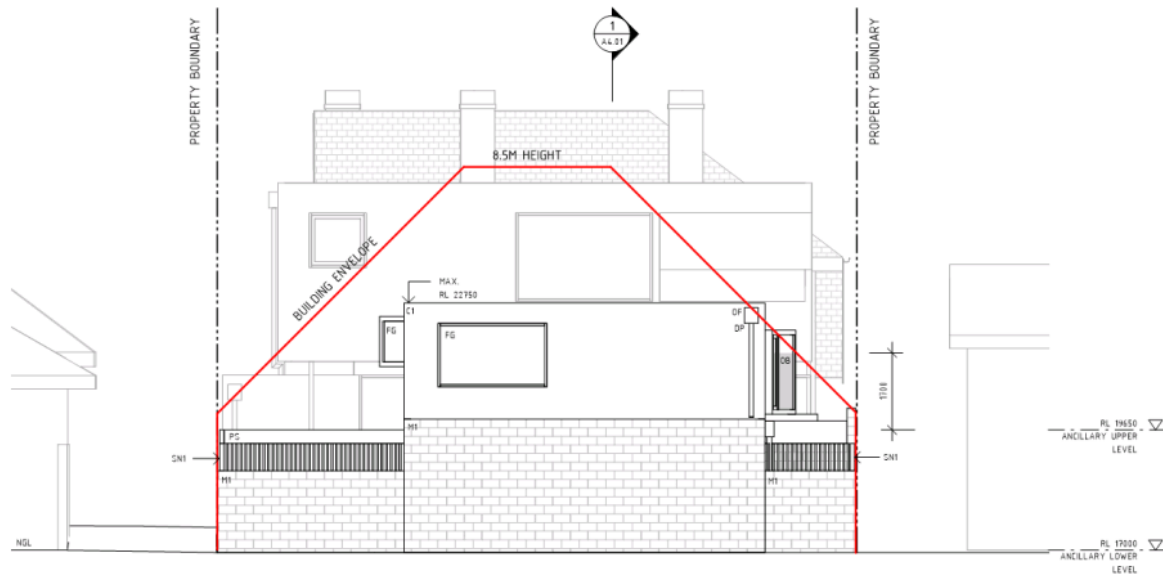
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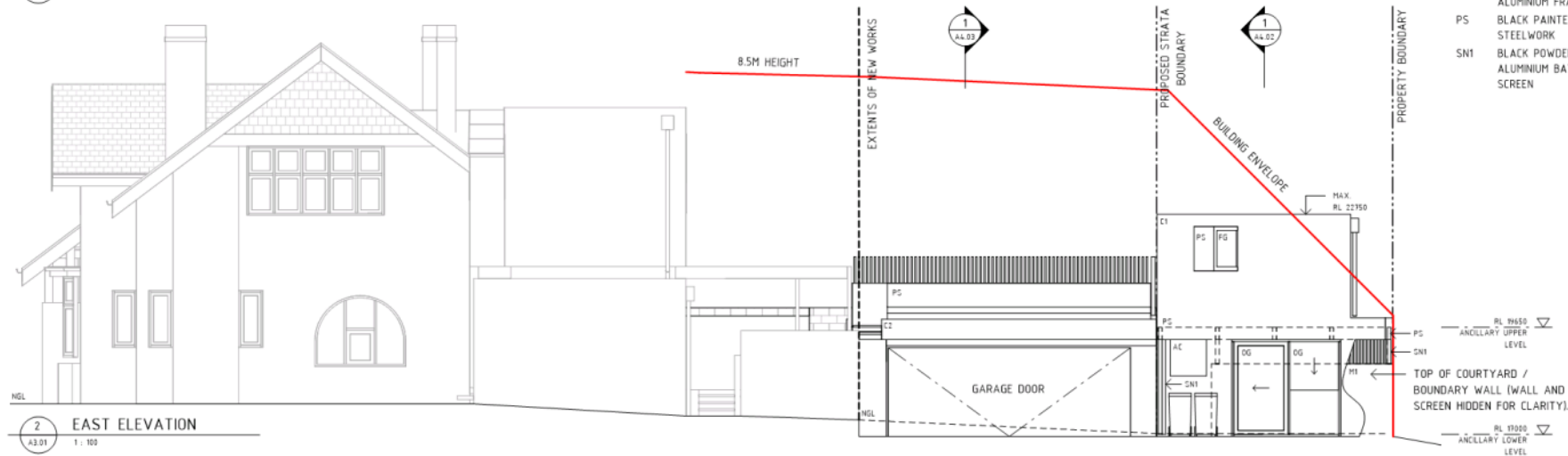
25-29 MELVILLE STREET HOBART TASMANIA 7000
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E MAIL@I2ARCHITECTURE.COM

LEGEND

- AC AIR CONDITIONING CONDENSER
- C1 GREY, TILT UP CONCRETE PANELS
- C2 GREY, INSITU CONCRETE
- DP DOWN PIPE
- FG FIXED GLAZING, BLACK POWDER COATED ALUMINIUM FRAME
- M1 GREY CONCRETE BLOCKWORK, TO MATCH EXISTING
- NGL NATURAL GROUND LEVEL
- OB OBSCURE GLAZING
- OF BOX GUTTER
- OG OVERFLOW OUTLET
- OG OPENABLE GLAZING, BLACK POWDER COATED ALUMINIUM FRAME
- PS BLACK PAINTED STEELWORK
- SN1 BLACK POWDER COATED ALUMINIUM BATTEN SCREEN



1 NORTH ELEVATION
A3.01 1:100



2 EAST ELEVATION
A3.01 1:100

PROPOSED BUILDING
ELEVATIONS

1:100 @ A3

PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

A3.01 B

I+2

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- LEGEND
- C1

GREY, TILT UP
CONCRETE PANELS
- DP

DOWN PIPE
- FG

FIXED GLAZING, BLACK
POWDER COATED
ALUMINIUM FRAME
- M1

GREY CONCRETE
BLOCKWORK, TO MATCH
EXISTING
- NGL

NATURAL GROUND
LEVEL
- OB

OBSCURE GLAZING
- OF

BOX GUTTER
OVERFLOW OUTLET
- OG

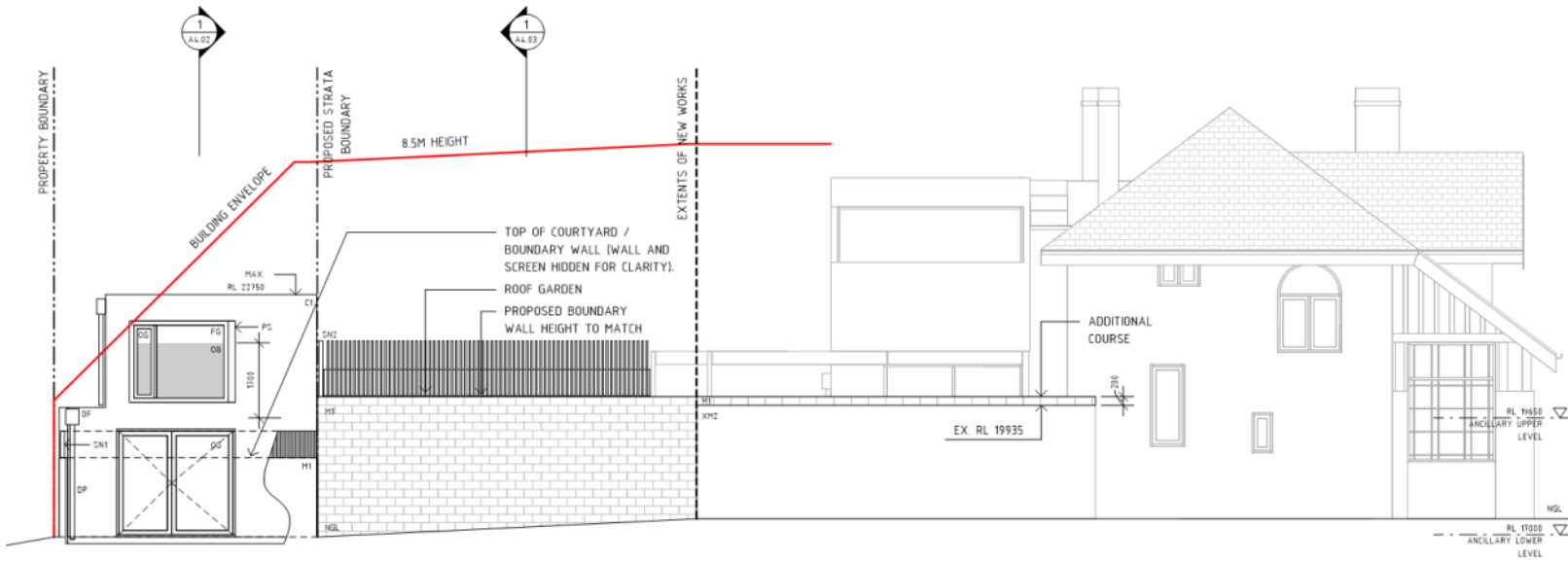
OPENABLE GLAZING,
BLACK POWDER COATED
ALUMINIUM FRAME
- PS

BLACK PAINTED
STEELWORK
- SN1

BLACK POWDER COATED
ALUMINIUM BATTEN
SCREEN
- SN2

TIMBER BATTEN SCREEN
- XM2

EXISTING GREY
CONCRETE BLOCKWORK



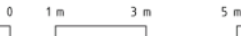
1 WEST ELEVATION
A3.02 1 : 100

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JPS

PROPOSED BUILDING
ELEVATIONS

1 : 100 @ A3

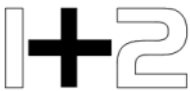


PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005
2016HRAH 18.10.21

A3.02 B

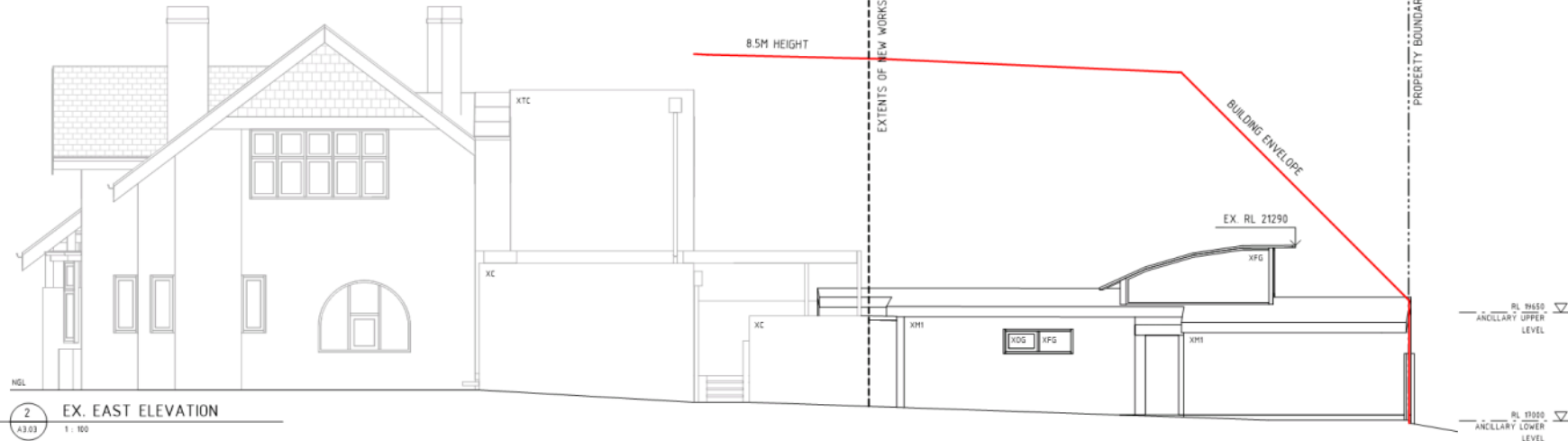
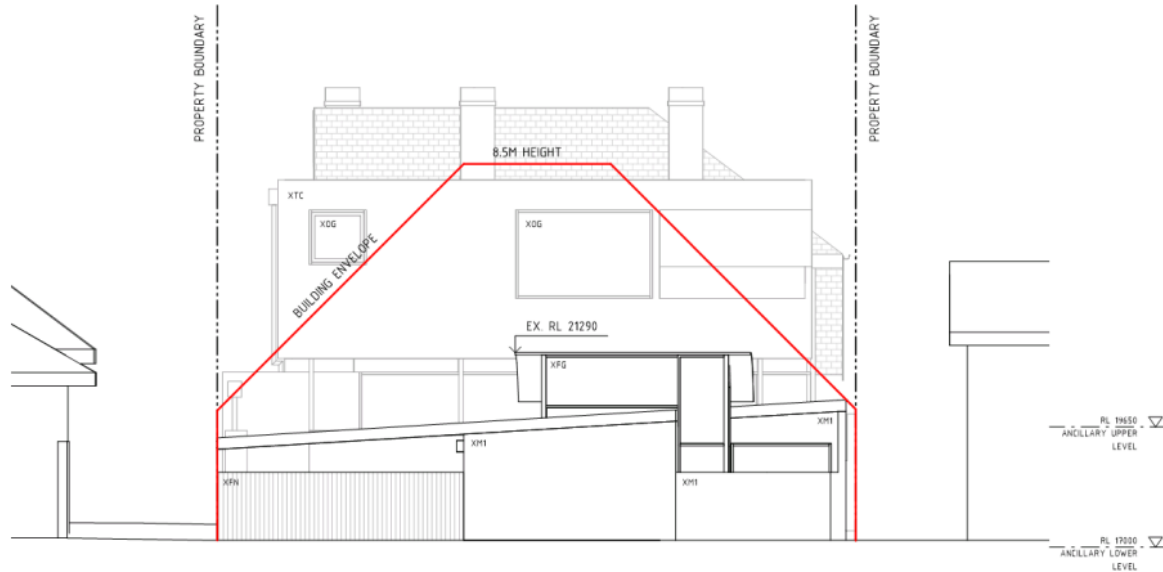


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LEGEND

- NGL NATURAL GROUND LEVEL
- XC EXISTING LIGHT GREY CONCRETE
- XFG EXISTING FIXED GLAZING
- XFN EXISTING PAILING FENCE
- XM1 EXISTING PAINTED RENDERED MASONRY
- XOG EXISTING OPENABLE GLAZING
- XTC EXISTING DARK TIMBER CLADDING



EXISTING BUILDING ELEVATIONS

0 1 m 3 m 5 m

1 : 100 @ A3

PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

A3.03 A



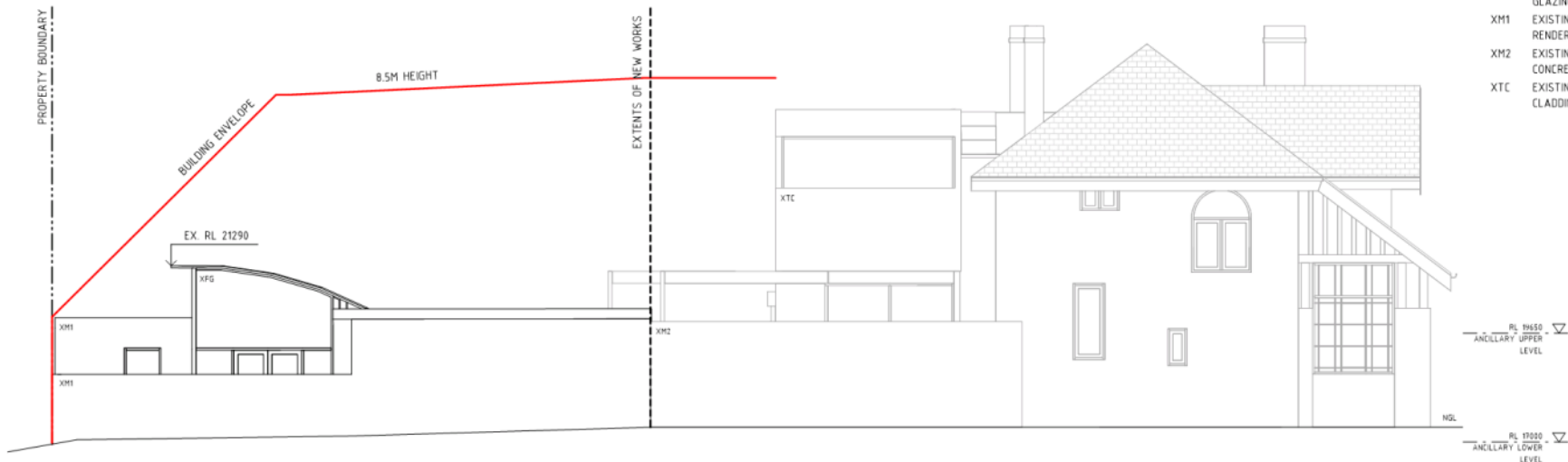
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LEGEND

- NGL NATURAL GROUND
LEVEL
- XFG EXISTING FIXED
GLAZING
- XM1 EXISTING PAINTED
RENDERED MASONRY
- XM2 EXISTING GREY
CONCRETE BLOCKWORK
- XTC EXISTING DARK TIMBER
CLADDING



1 EX. WEST ELEVATION
A3.04 1 : 100

S:\2021\2021 Lord Street House Alterations + Additions\A3.04.dwg

10/1/2022 14:57:48
10/1/2022 14:57:48

EXISTING BUILDING
ELEVATIONS

0 1 m 3 m 5 m

1 : 100 @ A3

PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

A3.04 A



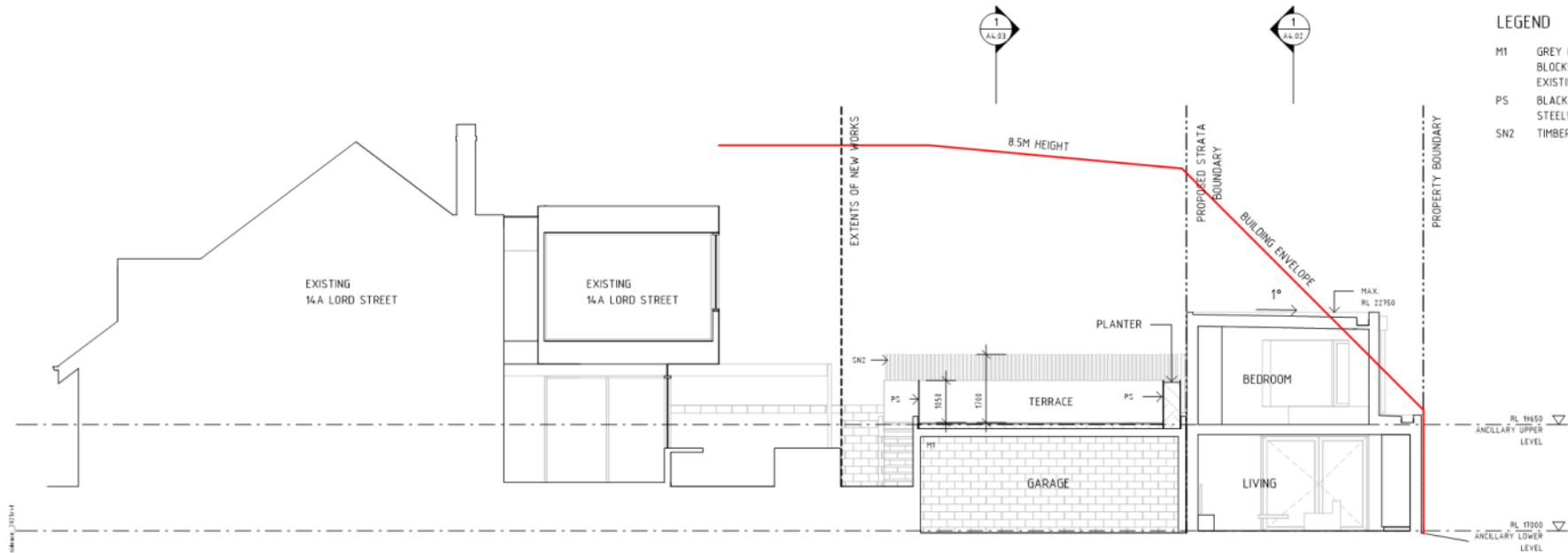
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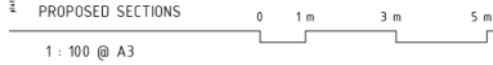
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E MAIL@IPLUS2ARCHITECTURE.COM

LEGEND

- M1 GREY CONCRETE
BLOCKWORK, TO MATCH
EXISTING
- PS BLACK PAINTED
STEELWORK
- SN2 TIMBER BATTEN SCREEN



1 SECTION A
A4.01 1:100



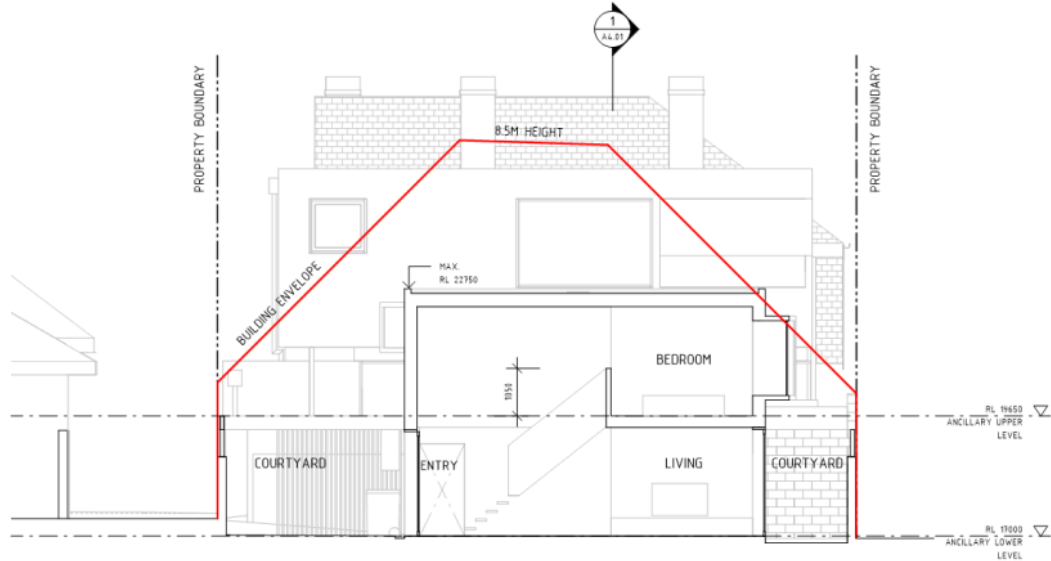
PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

A4.01 B



1 SECTION B
A4.02 1 : 100

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E MAIL@IPLUS2ARCHITECTURE.COM
LEGEND

S:\2016\100 Lord Street\100 Lord Street\100 Lord Street.dwg
18/10/2021 14:10:21
18/10/2021 14:10:21

PROPOSED SECTIONS

0 1 m 3 m 5 m

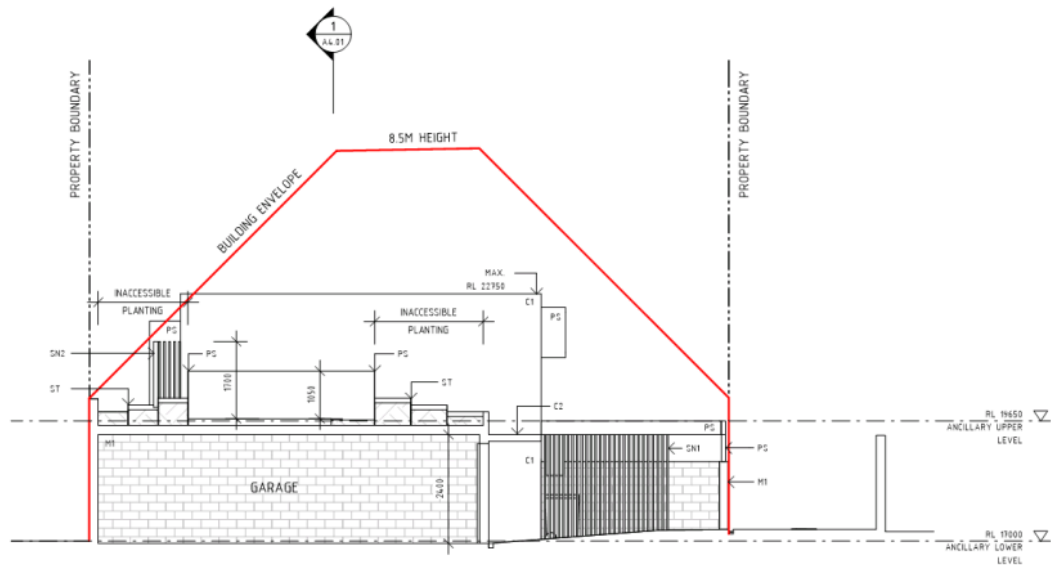
1 : 100 @ A3

PRELIMINARY
LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

A4.02 B



1 SECTION C (SOUTH ELEVATION)
A4.03 1:100



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LEGEND

- C1 GREY, TILT UP CONCRETE PANELS
- C2 GREY, INSITU CONCRETE
- M1 GREY CONCRETE BLOCKWORK, TO MATCH EXISTING
- PS BLACK PAINTED STEELWORK
- SN1 BLACK POWDER COATED ALUMINIUM BATTEN SCREEN
- SN2 TIMBER BATTEN SCREEN
- ST OXIDISED STEEL

PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

A4.03 B

S:\2016\2016 Lord Street House Alterations + Additions\A4.03.dwg

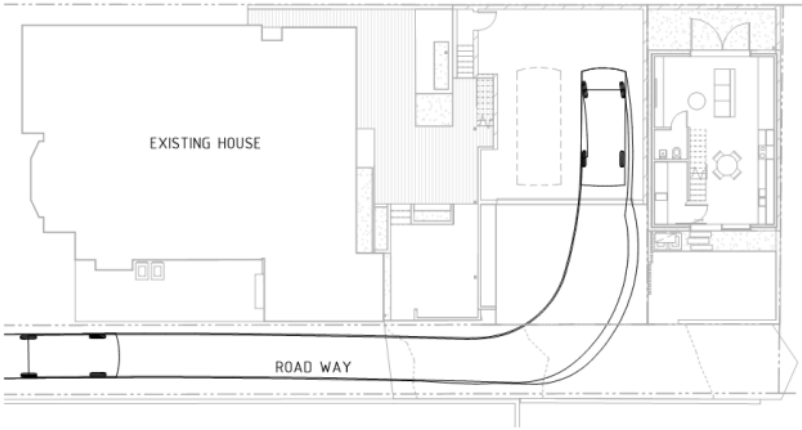
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PROPOSED SECTIONS

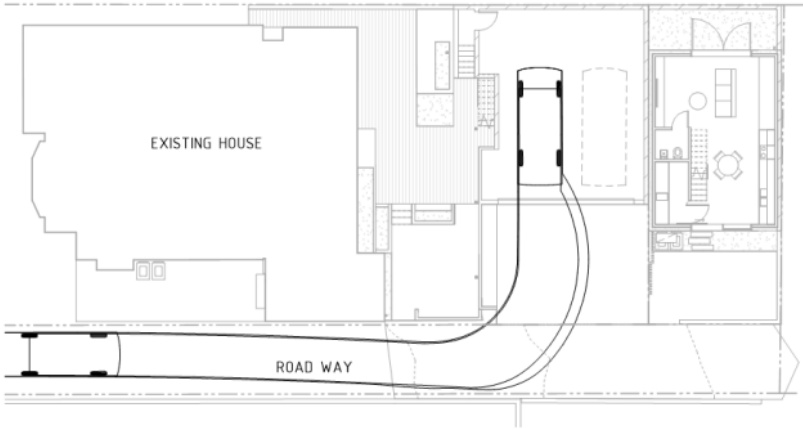
1:100 @ A3



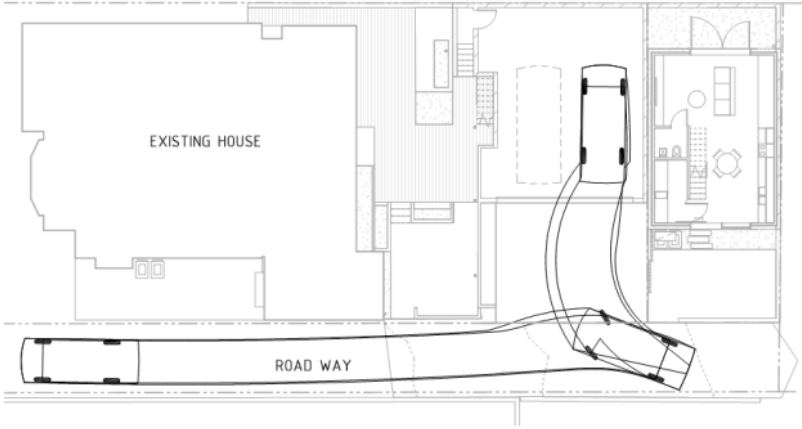
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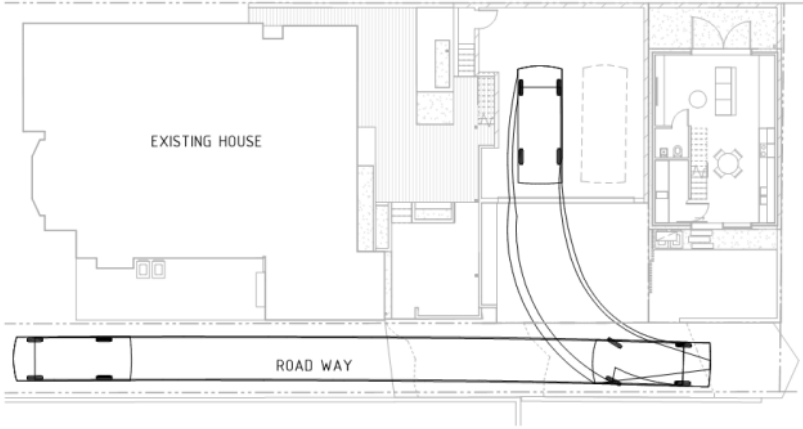
1 VEHICLE SWEEP PATH 1 (FORWARDS)
A9.01 1 : 200



2 VEHICLE SWEEP PATH 2 (FORWARDS)
A9.01 1 : 200



3 VEHICLE SWEEP PATH 3 (REVERSE)
A9.01 1 : 200



4 VEHICLE SWEEP PATH 4 (REVERSE)
A9.01 1 : 200

5/1/2022 10:00 AM Road/Driveway Swept Path 1_2022.dwg

10/1/2022 10:00 AM

VEHICLE SWEEP PATHS 0 2 m 6 m 10 m

1 : 200 @ A3



PRELIMINARY
LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005
2016HRAH 12.08.21

A9.01 A



ARCHITECTURE

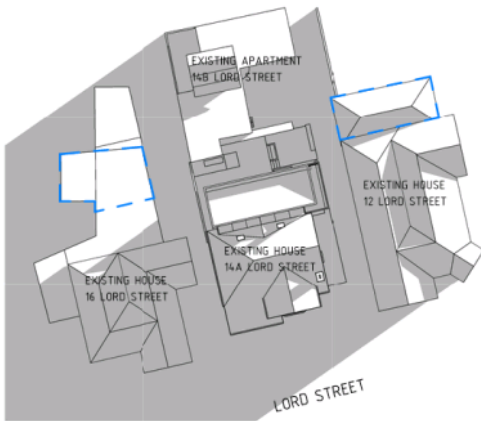
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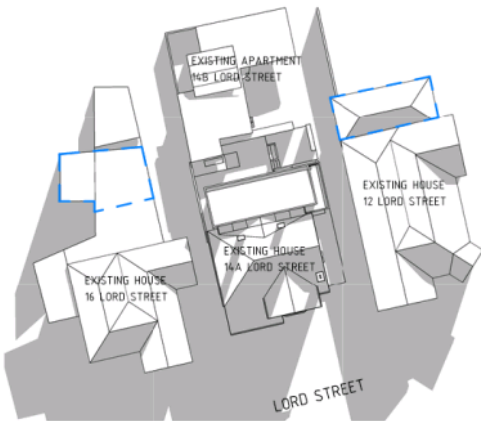
LEGEND

APPROXIMATE LOCATION
OF HABITABLE ROOMS IN
ADJACENT PROPERTIES.

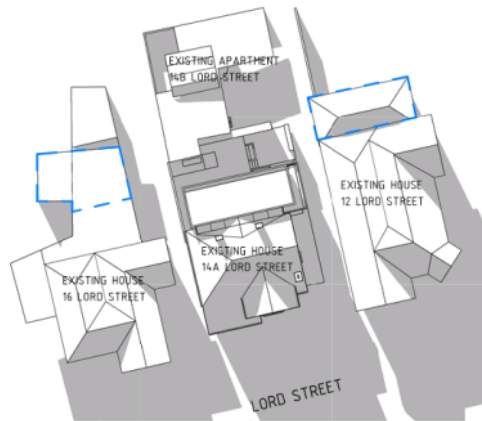
BUILDING ENVELOPE AS
PER 114.2 A3(a)



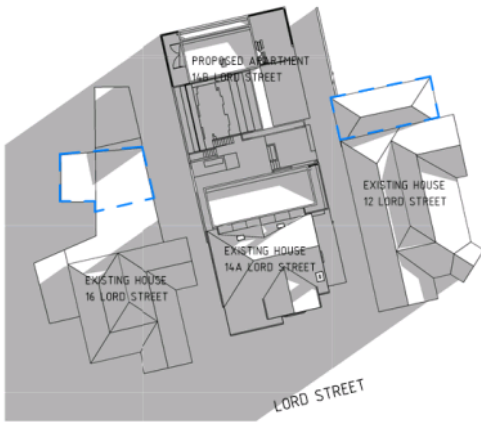
1 EXISTING SHADOW STUDY JUNE 9AM
AY.02 1 : 500



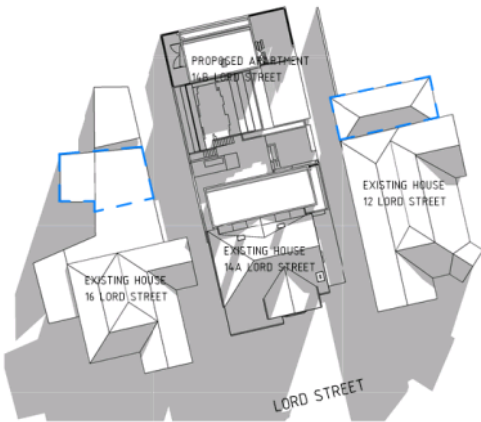
2 EXISTING SHADOW STUDY JUNE 12PM
AY.02 1 : 500



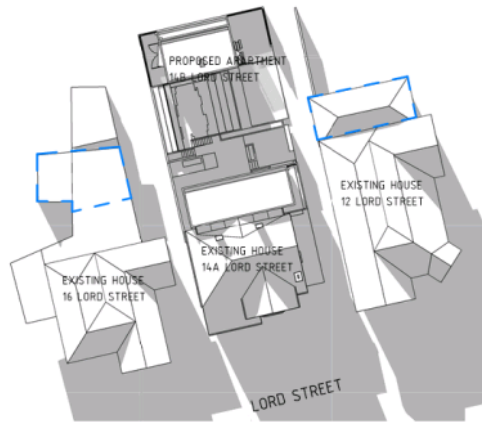
3 EXISTING SHADOW STUDY JUNE 3PM
AY.02 1 : 500



4 PROPOSED SHADOW STUDY JUNE 9AM
AY.02 1 : 500



5 PROPOSED SHADOW STUDY JUNE 12PM
AY.02 1 : 500



6 PROPOSED SHADOW STUDY JUNE 3PM
AY.02 1 : 500

S:\COMMISSION\2020\202006\20200606\20200606_2101.dwg

18/07/2021 14:52:14

AY.02

SHADOW DIAGRAMS JUNE

As indicated @ A3



PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

A9.02 B



I+2
ARCHITECTURE

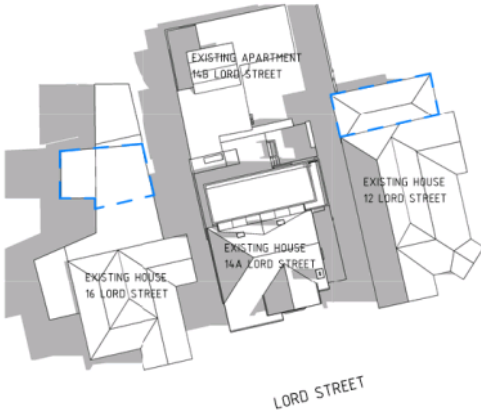
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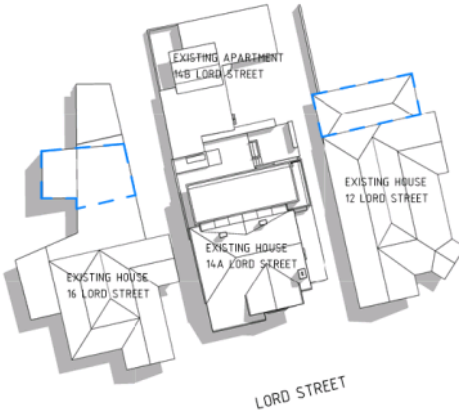
LEGEND

APPROXIMATE LOCATION
OF HABITABLE ROOMS IN
ADJACENT PROPERTIES.

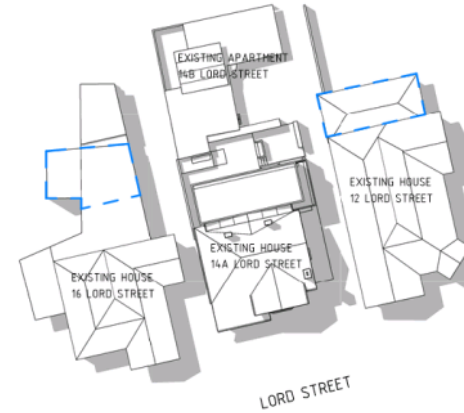
BUILDING ENVELOPE AS
PER 114.2 A3(a)



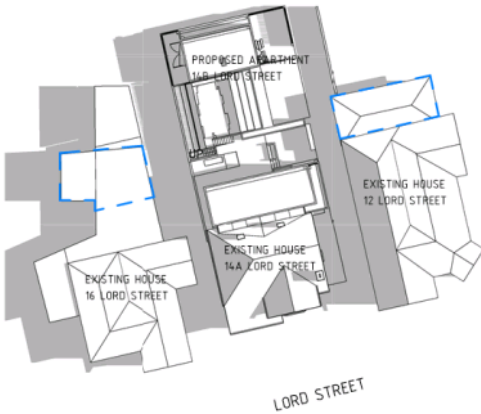
1 EXISTING SHADOW STUDY DECEMBER 9AM
AY.03 1 : 500



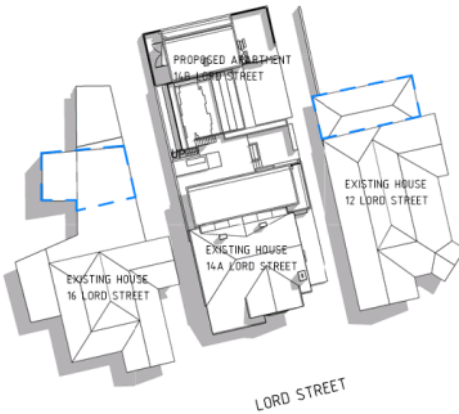
2 EXISTING SHADOW STUDY DECEMBER 12PM
AY.03 1 : 500



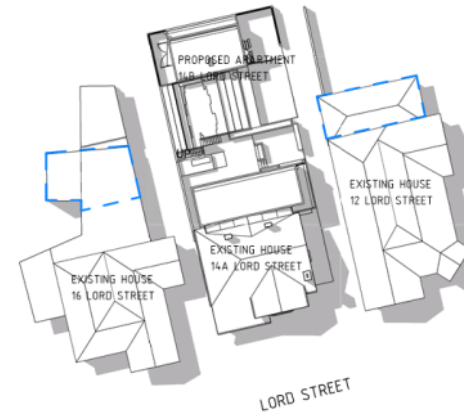
3 EXISTING SHADOW STUDY DECEMBER 3PM
AY.03 1 : 500



4 PROPOSED SHADOW STUDY DECEMBER 9AM
AY.03 1 : 500



5 PROPOSED SHADOW STUDY DECEMBER 12PM
AY.03 1 : 500



6 PROPOSED SHADOW STUDY DECEMBER 3PM
AY.03 1 : 500

SHADOW DIAGRAMS
DECEMBER

As indicated @ A3

0 5 m 15 m 25 m



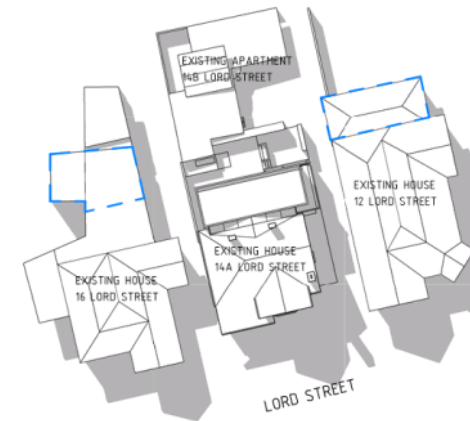
PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

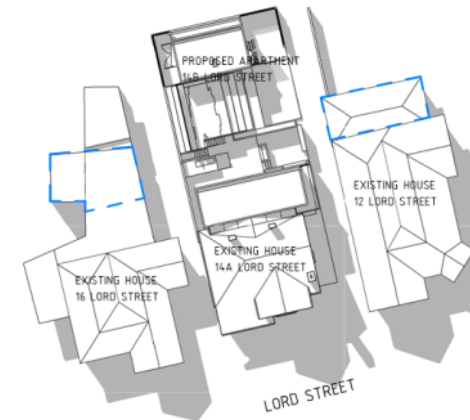
14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016/RAH 18.10.21

A9.03 B



3 EXISTING SHADOW STUDY MARCH 3PM
A9.04 1 : 500



6 PROPOSED SHADOW STUDY MARCH 3PM
A9.04 1:500

A9.04 A



I+2
ARCHITECTURE

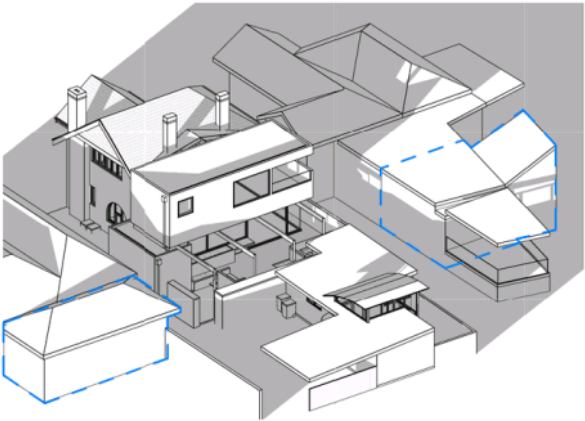
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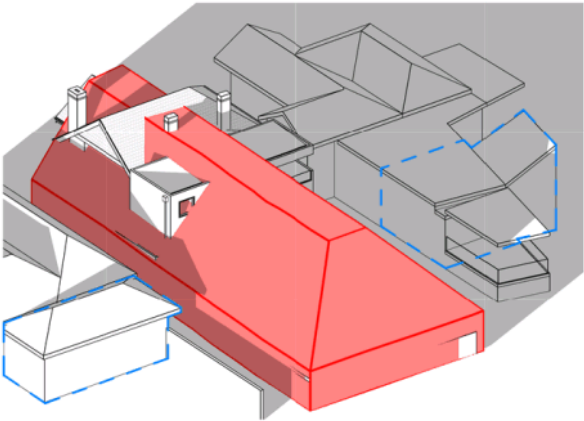
LEGEND

APPROXIMATE LOCATION
OF HABITABLE ROOMS IN
ADJACENT PROPERTIES.

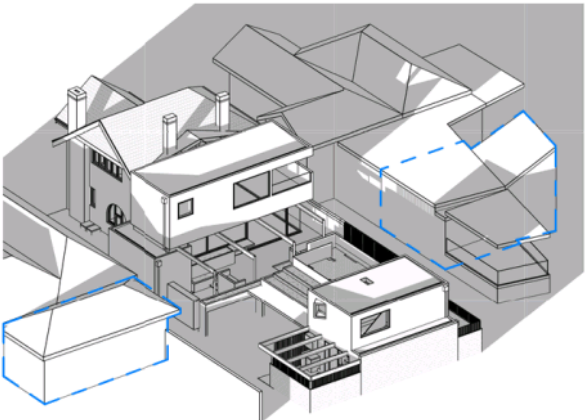
BUILDING ENVELOPE AS
PER 114.2 A3(a)



2 EXISTING 3D SHADOW STUDY JUNE 9AM
A9.05



3 BUILDING ENVELOPE 3D SHADOW STUDY JUNE 9AM
A9.05



1 PROPOSED 3D SHADOW STUDY JUNE 9AM
A9.05

SHADOW DIAGRAMS JUNE

PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

A9.05 A

I+2

ARCHITECTURE

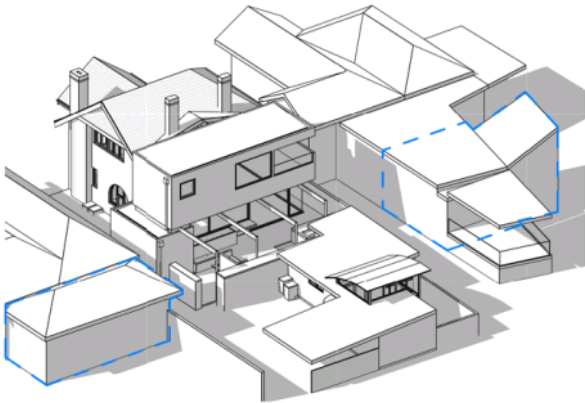
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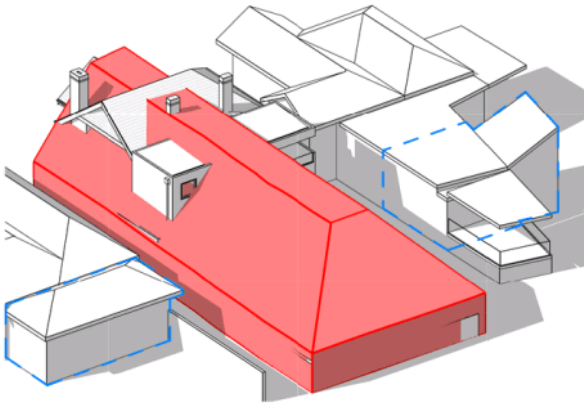
LEGEND

APPROXIMATE LOCATION
OF HABITABLE ROOMS IN
ADJACENT PROPERTIES.

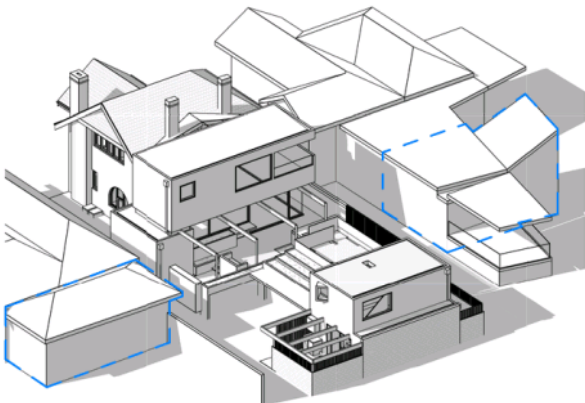
BUILDING ENVELOPE AS
PER 11.4.2 A3(a)



1 EXISTING 3D SHADOW STUDY DECEMBER 9AM
A9.06



2 BUILDING ENVELOPE 3D SHADOW STUDY DECEMBER 9AM
A9.06



3 PROPOSED 3D SHADOW STUDY DECEMBER 9AM
A9.06

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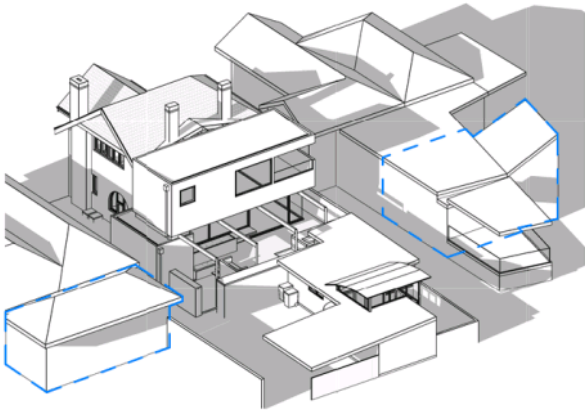
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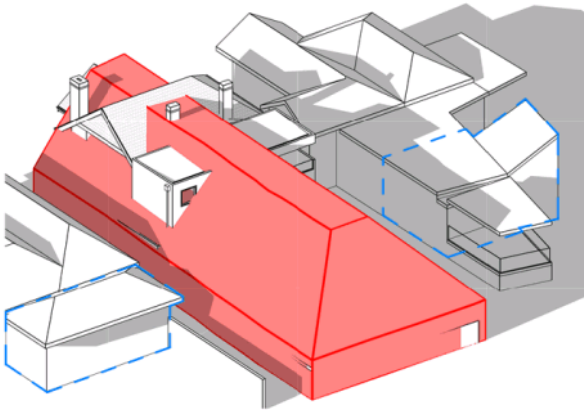
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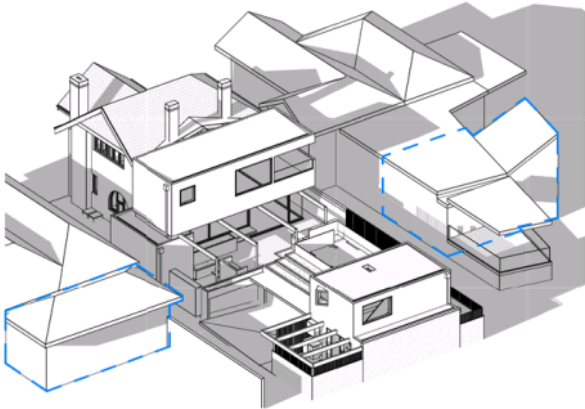
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1 EXISTING 3D SHADOW STUDY MARCH 9AM
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2 BUILDING ENVELOPE 3D SHADOW STUDY MARCH 9AM
A9.07



3 PROPOSED 3D SHADOW STUDY MARCH 9AM
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SHADOW DIAGRAMS MARCH

PRELIMINARY

LORD STREET HOUSE ALTERATIONS + ADDITIONS

14A & 14B LORD STREET, SANDY BAY, TASMANIA 7005

2016HRAH 18.10.21

A9.07 A





18.10.2021
Attention: Planning Officer
City of Hobart
16 Elizabeth Street
Hobart
TAS 7001

To Whom It May Concern,

14a & 14b LORD STREET, SANDY BAY TASMANIA 7005
PLN-21-532

PID: 5619873 & 5619881
Certificate of Title: 59085/1 & 2

Please find attached revised application for alterations and additions to 14a & 14b Lord Street, Sandy Bay 7005.

Included with this letter are the following documents:

AUTHOR	DOCUMENT	DETAIL
1+2 Architecture	Architecture Drawings	A0.00 B Cover Sheet A1.01 B Existing Site Plan A1.02 B Proposed Site Plan A1.03 A Existing Lower Level Floor Plan A2.01 B Lower Level Floor Plan A2.02 B Upper Level Floor Plan A2.03 B Roof Plan A3.01 B Proposed Building Elevations A3.02 B Proposed Building Elevations A3.03 A Existing Building Elevations A3.04 A Existing Building Elevations A4.01 B Building Sections A4.02 B Building Sections A4.03 B Building Sections A9.01 A Vehicle Swept Paths A9.02 B Shadow Diagrams June A9.03 B Shadow Diagrams December A9.04 A Shadow Diagrams March



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		A9.05 A Shadow Diagrams June
		A9.06 A Shadow Diagrams December
		A9.07 A Shadow Diagrams March
Aldanmark	Hydraulic Engineering Drawings	H0.01 A Index H0.02 A Engineering Notes H1.01 A Site Services Plan H2.01 A Drainage Services Plan – Ground Floor H2.02 A Drainage Services Plan – Upper Level H2.03 A Drainage Services Plan – Roof H4.01 A Hydraulics Details - 1 H4.02 A Hydraulics Details - 2

In response to City of Hobart Request for Information dated 23 August 2021 for application PLN-21-532 please refer below.

PLN Fi1, Item 1

*Please confirm the number of existing and proposed dwellings on the parent lot.
Plan A1.01 A appears to show three dwellings, two on lot 1 and one on lot 2.*

Please refer to A1.01 B, there is currently 1 dwelling on Lot 1 and 1 dwelling on Lot 2. The proposed development will maintain the current number of total dwellings.

PLN Fi1, Item 2

The proposed double garage and rear unit would sit outside the building envelope on the side and rear boundaries, please provide justification for the proposed development to enable assessment against clause 11.4.2.P3(a)(iv) and (b) of the Hobart Interim Planning Scheme 2015 which states:

(iv) visual impacts caused by the apparent scale, bulk or proportions of the dwelling when viewed from an adjoining property; and

(b) provide separation between dwellings on adjoining properties that is consistent with that existing on established properties in the area.

Particularly in relation to the height of the boundary walls and the two storey component.



The proposed development has been sited with consideration given to numbers 12 and 16 Lord Street to minimise the impact upon their access to natural light and distant landscape views. Proposed boundary walls are generally consistent with existing boundary walls. The apparent bulk of the proposed two-storey dwelling, as viewed from 10 Lord Street and 11 Duke Street, has been minimised through the use flat roofs and a stepped massing to reduce the overall bulk and minimise the encroachment on the building envelope. The overall height and bulk of the proposed scheme is significantly less than that permitted by the building envelope.

PLN Fi1, Item 3

The setback of the proposed roof terrace would not comply with the permitted setback of 3m from the side boundary or 6m from the private open space of a dwelling on the same site. Please clarify whether any other measures are proposed to minimise overlooking of:

- *The dwelling on the adjoining property at 16 Lord Street and its private open space*
- *The private open space of the proposed dwelling at 14b Lord Street*

Please also confirm whether the garden part of the roof garden would or would not be accessible.

The proposal has been amended with the inclusion of a screening device to provide visual privacy from the proposed roof terrace of 14b Lord Street to 16 Lord Street in accordance with the requirements of the Acceptable Solution 11.4.6 A1. The planters shown on the terrace are predominately inaccessible, except for occasional maintenance access.

PLN Fi1, Item 4

Despite the angle of the bedroom window for the proposed rear unit, the window would not comply with the permitted setback of 3m from the side boundary Please clarify whether any other measures are proposed to minimise overlooking of: The private open space at 16 Lord Street.

The fixed and openable glazing to the bedroom of the proposed dwelling on Lot 2 will have obscured glazing to mitigate any overlooking of private open spaces at 16 Lord Street in accordance with Acceptable Solution 11.4.6 A2 (b)(ii).

**PLN Fi1, Item 5**

Clause 10.4.8.requires a waste storage area for multiple dwellings. On a site plan, please demonstrate how the proposal would comply with either the acceptable solution or the performance criteria for this clause which states

Waste storage facilities for Lot 1 and Lot 2 are shown on plan A2.01 B.

PLN Fi6, Item 1

Solar access diagrams showing the sunlight to habitable rooms (excluding bedrooms) of any dwellings on adjoining lots, at 9.00am, 12.00pm and 3.00pm on March and June 21st, with the proposed development and with the existing development on the site.

Please refer to drawings A9.02 to A9.07 for solar access diagrams.

For items **HER Fi 1 to 3** please refer to revised architectural drawings included this letter which describe the existing dwelling and proposed materials for all new elements.

For items **Sw 1, Sw 6 & TW1**, please refer to documents supplied by Aldanmark included with this letter.

Should any further detail or clarifications be required, please contact 1 + 2 Architecture.

Kind regards,

For 1 Plus 2 Architecture Pty. Ltd.

Michael Carlotto

HYDRAULIC SERVICES DRAWINGS
HARRIS
14A LORD STREET
SANDY BAY TAS 7005

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			DRAWN: SL		CLIENT: HARRIS	PROJECT: HARRIS RESIDENCE	SHEET: INDEX
			CHECKED: TW		ADDRESS: 14A LORD STREET SANDY BAY TAS 7005	ISSUE: PLANNING APPROVAL	SCALE:
B	PLANNING APPROVAL	05/11/2021	DESIGN CHECK: TW				TOTAL SHEETS: 9
A	PLANNING APPROVAL	18/10/2021	CERTIFIER:				SIZE: A3
REV.	DESCRIPTION	DATE	APPROVAL			0 1 2 3 4 5m	PROJECT No: 21E29-5
							SHEET No: H0.01
							REV No: B



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HYDRAULIC SERVICES - GENERAL NOTES

GENERAL NOTES:

- THESE DRAWING ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS, PROJECT CONTRACT AND SPECIFICATIONS. STANDARDS WATER SERVICES ARE THE MOST RECENT VERSION.
- SEWER, STORMWATER AND WATER SERVICES SHALL BE IN ACCORDANCE WITH THE NCC VOL 3 (PCA), AS3500, WSAA CODES, TASWATER AND TO LOCAL AUTHORITY APPROVAL.
- IT IS ASSUMED THAT ADJACENT TO THE DEVELOPMENT SITE IS ADEQUATE INFRASTRUCTURE PROVIDED BY THE LOCAL AUTHORITY AND OTHER STATUTORY AUTHORITIES TO SUPPLY ROAD ACCESS, WATER AND POWER AS REQUIRED BY THIS DESIGN, AND THERE IS ADEQUATE INFRASTRUCTURE OR ENVIRONMENTAL CAPACITY TO RECEIVE STORMWATER AND SEWERAGE DRAINAGE. PARTICULAR ASSUMPTIONS ARE DESCRIBED IN THE FOLLOWING SECTIONS.
- THE LOCATION OF EXISTING SERVICES AND CONNECTION POINTS WHERE SHOWN ON PLANS ARE APPROXIMATE ONLY AND SHALL BE CONFIRMED ON SITE.
- FOLLOWING AGREEMENT WITH THE SUPERINTENDANT, TERMINATE AND ABANDON REDUNDANT EXISTING SERVICES DISCOVERED DURING CONSTRUCTION AND MAKE A NOTE ON AS-CONSTRUCTED DRAWING.
- LOCATE ALL EXISTING GAS, ELECTRICAL, TELECOMMUNICATIONS, WATER MAINS, SEWER MAINS AND STORMWATER MAINS ETC. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND ADVISE THE SUPERINTENDANT OF ANYTHING THAT APPEARS NOT TO HAVE BEEN CONSIDERED IN THE DESIGN.
- CONFIRM ALL LEVELS ON SITE PRIOR TO THE COMMENCEMENT OF WORKS.
- HYDRAULIC LAYOUT TO BE COORDINATED WITH OTHER SERVICES. HYDRAULIC LAYOUT AS SHOWN IS NOTIONAL, LAYOUT TO BE CONFIRMED ON SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT A VALID BUILDING AND PLUMBING PERMIT AND START WORKS NOTICE IS IN PLACE FOR THE WORK AND THAT THE BUILDING SURVEYOR IS NOTIFIED OF ALL SITE INSPECTION REQUESTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES CAUSED BY HIS SUB-CONTRACTORS, ANY SERVICE DAMAGED IS TO BE REINSTATED IMMEDIATELY.
- ON COMPLETION OF WORKS PROVIDE THREE SETS OF AS-CONSTRUCTED DRAWINGS AND SERVICE MANUALS ALONG WITH ELECTRONIC DRAWING FILES IN PDF AND DWG FORMATS SUITABLE FOR READING WITH A RECENT VERSION OF ADOBEAUTOCAD TO THE SUPERINTENDANT.
- THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING ALL SITE INSPECTIONS AND OBSERVING ALL HOLD POINTS NOMINATED WITHIN THE CONTRACT, BY THE BUILDING SURVEYOR OR PLUMBING SURVEYOR.
- NOMINAL DIAMETERS FOR PIPES (DN) REFER TO THE INSIDE DIAMETER (ID BORE).
- CONCEAL ALL PIPEWORK IN CEILING SPACE, DUCTS, CAVITIES, WALL CHASES, CUPBOARDS ETC. UNLESS OTHERWISE APPROVED.
- THE CONTRACTOR SHALL ALLOW TO COORDINATE WITH MECHANICAL AND REFRIGERATION SERVICES AND PROVIDE TUNDISHES CONNECTED TO SEWER OR STORMWATER AS APPROPRIATE TO ALL CONDENSATE DRAINAGE AND RELIEF VALVES. ALLOW TO PROVIDE AND INSTALL MAG-IN-WALL TUNDISHES WITH STAINLESS STEEL COVER WINDOW (SUPPLIED BY NIA GRIFFITH) OR EQUAL APPROVED TYPE.
- TRENCHING FOR FLEXIBLE PIPEWORK SHALL BE IN ACCORDANCE WITH AS2566 AND AS3500.
- ALL PIPEWORK UNDER TRAFFICABLE AREAS, SLABS OR PAVEMENTS IS TO BE FULLY BACKFILLED WITH COMPACTED FCR.

STORMWATER NOTES:

- STORMWATER PIPE INFRASTRUCTURE HAS BEEN DESIGNED TO CONVEY A 20 YEAR ANNUAL EXCEEDANCE POSSIBILITY (5% AEP) AT A 5 MINUTE STORM DURATION, WITH OVERLAND FLOW PATHS PROVIDED FOR 1:100 YEAR ANNUAL EXCEEDANCE PROBABILITY (1% AEP). IT IS ASSUMED THAT THE DOWNSTREAM INFRASTRUCTURE AND/OR ENVIRONMENT CAN SAFELY RECEIVE THE 5% AEP EVENT WITH A 5 MINUTE STORM DURATION.
- ALL MATERIALS AND WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH AS3500, NCC VOL 3 (PCA), COUNCIL STANDARD DRAWINGS AND SPECIFICATION AND TO THE SATISFACTION OF COUNCIL'S DEVELOPMENT ENGINEER.
- ALL PIPEWORK SHALL BE MINIMUM DN100 DWV S/N6 AT 1:100 GRADE (1.00%) UNLESS NOMINATED OTHERWISE ON PLANS.
- MINIMUM GRADE OF PAVED AREAS AND PIPEWORK SHALL BE 1 IN 100 UNLESS NOTED OTHERWISE.
- INSTALL ALL AG DRAINS TO THE REQUIREMENTS OF AS3500 AND THE NCC.
- PROVIDE INSPECTION OPENINGS TO ALL DRAINAGE PIPEWORK IN ACCORDANCE WITH AS3500 REQUIREMENTS EVEN IF NOT SHOWN IN DRAWINGS.
- PIPE AND CHANNEL INFRASTRUCTURE HAS BEEN DESIGNED TO CONVEY 20 YEAR ANNUAL EXCEEDANCE POSSIBILITY (5% AEP) STORMS, WITH OVERLAND FLOW PATHS PROVIDED FOR 1% AEP STORMS. IT IS ASSUMED THAT WATER FLOWING ONTO THE DEVELOPMENT SITE IS CONTAINED WITHIN LOCAL AUTHORITY INFRASTRUCTURE FOR 5% AEP STORMS AND THE ROAD RESERVE FOR 1% AEP STORMS.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY'S BY-LAWS AND AS/NZS3500.
- STORMWATER TRENCHES, PIPE BEDDING AND BACK FILLING TO COMPLY WITH THE CONCRETE PIPE ASSOCIATION OF AUSTRALIA INSTALLATION REQUIREMENTS FOR TYPE HS2 SUPPORT.
- BELOW GROUND PIPEWORK AND FITTINGS TO BE DWV S/N6, JOINTS SHALL BE OF SOLVENT CEMENT TYPE OR FLEXIBLE JOINTS MADE WITH APPROVED RUBBER RINGS.
- PIPEWORK SHALL BE LAID IN POSITION AND AT THE GRADES SHOWN.
- MINIMUM GRADE OF PIPEWORK SHALL BE 1 IN 100 UNLESS NOTED OTHERWISE (U.N.O.).
- MINIMUM SIZE OF PIPEWORK SHALL BE DN100.
- SURFACE WATER DRAINS, GUTTERS, GRATED PITS, AND JUNCTION BOXES SHALL BE CONSTRUCTED AS DETAILED OR AS SPECIFIED BY THE MANUFACTURER.
- ALL MANHOLES TO BE LOCATED CLEAR OF FUTURE FENCE LINES.

SEWER NOTES:

- ALL MATERIALS AND WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH AS3500, NCC VOL 3 (PCA), TASMANIAN APPENDIX OF THE NCC VOL 3 (PCA), COUNCIL STANDARD DRAWINGS AND SPECIFICATION AND TO THE SATISFACTION OF COUNCIL'S DEVELOPMENT ENGINEER.
- CONFIRM THE LOCATION AND LEVEL OF THE NOMINATED OUTLET PRIOR TO TRENCH EXCAVATION OR LAYING OF ANY DRAINS. ASCERTAIN FROM TASWATER ALL NECESSARY CONNECTION REQUIREMENTS AND INSTALL ALL WORK FOR CONNECTION IN ACCORDANCE WITH THESE REQUIREMENTS.
- SEWER TRENCHES, PIPE BEDDING AND BACK FILLING TO COMPLY WITH AS2566 & AS3500 2.
- ALL PIPEWORK SHALL BE ADEQUATELY SUPPORTED TO AS3500.
- PIPEWORK SHALL BE CONSTRUCTED OF DWV S/N6 U.N.O. PIPEWORK RECEIVING HOT DISCHARGES SHALL BE CONSTRUCTED OF HIGH DENSITY POLYETHYLENE (HDPE) OR COPPER TYPE 'B'.
- PIPEWORK SHALL HAVE BE MINIMUM CLASS S/N6 UNLESS NOMINATED OTHERWISE ON PLANS.
- PIPEWORK SHALL BE PRESSURE TESTED PROGRESSIVELY TO ENSURE NO LEAKS.
- ALL PIPEWORK SHALL BE CONCEALED IN WALLS, VOID SPACE OR DUCTS UNLESS NOTED OTHERWISE.
- MINIMUM GRADE OF PIPEWORK SHALL BE 1:40 FOR BRANCHES AND 1 IN 60 FOR DRAINS UNLESS NOTED OTHERWISE.
- MINIMUM SIZE OF BRANCH D/N5 AND MINIMUM SIZE OF DRAINS SHALL BE DN100.
- WHERE FLOOR WASTE GULLIES ARE INDICATED, THE FLOORS SHALL BE GRADED TOWARDS THE OUTLET. FLOOR WASTE GULLIES CONNECTED TO LAUNDRY FIXTURES SHALL BE ANTI-FOAM TYPE.
- ALL FITTINGS TO BE ISOLATED BY AN APPROVED TRAP PRIOR TO CONNECTION TO THE SEWER LINE.
- PROVIDE AIR ADMITTANCE VALVES AND ATMOSPHERIC VENTS IN ACCORDANCE WITH AS3500 REQUIREMENTS.
- INSPECTION OPENINGS SHALL BE PROVIDED IN ACCORDANCE WITH AS3500.
- ONE OVERFLOW RELIEF GULLY SHALL BE PROVIDED FOR THE SITE WHICH SHALL BE PRIMED BY AN EXTERNAL WATER SOURCE.
- WHERE PIPEWORK PENETRATES FIRE RATED WALLS OR FLOORS, A FIRE STOP COLLAR SHALL BE INSTALLED. ALL WORK SHALL BE STRICTLY INSTALLED TO THE MANUFACTURER'S RECOMMENDATIONS.
- NO SEWER CONNECTIONS SHALL BE MADE WITHIN RESTRICTED ZONES OF STACKS AS PER AS3500. INSTALL LONG RADIUS BENDS AT THE BASE OF ALL STACKS AS PER AS3500 AND INCLUDE ALL BRACKETS AND SUPPORTS.

WATER NOTES:

- WATER SERVICES TO BE CONSTRUCTED IN ACCORDANCE WITH AS3500 PARTS 1 AND 4 AND TO THE SATISFACTION OF COUNCILS (OR TAS WATER FOR EXTERNAL DEVELOPMENT ENGINEER).
- ALL CONNECTIONS TO EXISTING MAINS TO BE CARRIED OUT BY TASWATER AT CONTRACTORS COST UNLESS NOMINATED OTHERWISE ON PLANS.
- GENERAL MATERIALS, INSTALLATION & TESTING SHALL COMPLY WITH AS3500 PARTS 1 AND 4.
- ALL COPPER PIPEWORK SHALL BE HARD DRAWN TUBING TYPE 'B' CONFORMING TO AS 1432.
- AS AN ALTERNATIVE TO SILVER SOLDERED JOINTS, PRESS FITTED JOINTS MAY BE USED. ALLOW TO USE THE VIEGA PROGRESS SYSTEM WITH INSTALLATION IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND SPECIFICATIONS.
- ALL PIPEWORK SHALL BE CONCEALED WHERE POSSIBLE. WHERE PIPEWORK IS EXPOSED IT SHALL BE CHROME PLATED.
- WHERE PIPEWORK IS IN CONTACT WITH DISSIMILAR METALS, THE METALS SHALL BE INSULATED AGAINST BI-METAL CORROSION.
- MINIMUM COVER TO BE 750mm UNDER TRAFFICABLE AREAS, 600mm ELSEWHERE UNLESS NOMINATED OTHERWISE ON PLANS.
- PROVIDE STOP VALVES AT ALL BRANCH OFFTAKES.
- ALL TRENCHES UNDER TRAFFICABLE AREAS, INCLUDING DRIVEWAYS, TO BE BACKFILLED WITH COMPACTED FCR.
- ELECTROMAGNETIC TRACKING TAPE TO BE PLACED OVER ALL TRENCHES CONTAINING WATER PIPES 500 OR GREATER ABOVE HAUNCHING.
- ALL ISOLATION VALVES SHALL BE POSITIONED IN APPROVED ACCESSIBLE LOCATIONS. VALVES LOCATED IN DUCTS OR WALLS SHALL BE POSITIONED BEHIND APPROVED TYPE ACCESS COVERS.
- ALL SLOVED STOP VALVES SHALL HAVE UNION COUPLINGS AND BE ACCESSIBLE. GROUP VALVES WHEREVER POSSIBLE.
- ALL COPPER PIPEWORK SHALL BE HARD DRAWN TUBING TYPE 'B' CONFORMING TO AS 1432.
- ALL POLYETHYLENE PIPEWORK SHALL BE PN16 PE100 CONFORMING TO AS 4130.
- THRUST BLOCKS SHALL BE INSTALLED AS REQUIRED BY WSAA AND AS3500.
- HOT WATER TO BE STORED AT MINIMUM 60°C WITH TEMPERING DEVICE INSTALLED TO LIMIT OUTLET TEMPERATURE TO 50°C TO ABILUTION AREAS, 60°C TO KITCHEN SINK, CLEANSERS SINK AND LAUNDRY TROUGH AND TEMPERED TO 45°C WITH THERMOSTATIC MIXING VALVES IN DISABLED, CHILD CARE AND AGED CARE FACILITIES.
- TEMPERED, COLD WATER, HOT WATER PIPEWORK AND VALVES SHALL BE LAGGED AS PER AS/NZS 3500 4:2018 SECTION 8 FOR CLIMATE REGION B. HOT WATER CIRCULATING LINE TO BE LAGGED WITH SECTIONAL ROCKWOOL WITH FOIL OUTER COVER. EXTERNAL LAGGING TO BE UV PROTECTED, AND LAGGING EXPOSED TO MOISTURE NEEDS TO BE MOISTURE PROTECTED. SOLAR FLOW AND RETURN LAGGING SHOULD BE RATED FOR TEMPERATURES UP TO 150°C, OTHER LAGGING RATED TO 105°C. ALL LAGGING SHOULD BE FIRE RATED TO NCC REQUIREMENTS, PVC FREE, ZERO OZONE DEPLETING POTENTIAL, LOW VOLATILE ORGANIC COMPOUNDS.
- ONE PRESSURE RELIEF VALVE SET TO 500 KPA SHALL BE PROVIDED TO ALL WATER PIPES AT THE POINT OF ENTRY INTO A BUILDING.
- HOSE BIB COCKS SHALL BE 600mm ABOVE FINISHED SURFACE LEVEL AND SHALL BE 20mm IN SIZE, U.N.O. AND FITTED WITH APPROVED VACUUM BREAKERS. THE PLUMBER SHALL ARRANGE FOR ALL INSPECTIONS AND TESTING OF SERVICES REQUIRED BY THE LOCAL AUTHORITY PRIOR TO CONCEALMENT. PRESSURE TEST HOT AND COLD WATER SERVICES TO 15 TIMES NORMAL WORKING PRESSURE AND FIRE SERVICES TO 1700 KPA MINIMUM PRESSURE PRIOR TO CONNECTION TO EXISTING SERVICES. PUMP EQUIPMENT SHALL BE REMOVED WHILST TESTING IS CARRIED OUT.
- ALL TEMPERING AND THERMOSTATIC MIXING VALVES SHALL BE EASILY LOCATED FOR SAFE OHS ACCESS.
- FOLLOWING COMPLETION OF THE WORKS, FLUSH ALL PIPING SYSTEMS AND LEAVE FREE OF FOREIGN MATTER, CLEAN OUT AERATORS, STRAINERS, FILTERS, ETC., FLOW AND PRESSURE TEST ALL HYDRANTS AND HOSE REELS.

BUILDING HYDRAULICS:

- ALL MATERIALS AND WORKMANSHIP TO BE DONE IN ACCORDANCE WITH AS3500, NCC VOL 3 (PCA), TASMANIAN APPENDIX OF THE NCC VOL 3 (PCA) AND LOCAL AUTHORITY REQUIREMENTS.
- ALL DRAINAGE PIPEWORK SHALL BE DWV CLASS S/N6 U.N.O. ALL WASTE AND VENT SHALL BE DWV CLASS PIPE.
- DURING CONSTRUCTION TEMPORARILY SEAL ALL OPEN ENDS OF PIPES AND VALVES TO PREVENT ENTRY OF FOREIGN MATTER. DO NOT USE RAGS, PAPER OR WOODEN PLUGS.
- SUPPLY AND INSTALL ALL FIXTURES, VALVES, TAPWARE AND SUNDRY ITEMS AS SCHEDULED WITHIN THE SPECIFICATION.
- PROVIDE FIRE STOPS AS REQUIRED.
- CONTRACT DRAWINGS ARE DIAGRAMMATIC AND AS SUCH SHOW THE INTENT OF DESIGN. INSTALLATION TO BE AS PER AS/NZS3500. ALLOW FOR ALL BENDS, OFFSETS AND OTHER MEASURES AS NECESSARY TO AVOID INTERFERENCE WITH THE STRUCTURE AND/OR OTHER BUILDING SERVICES.
- REFER TO ARCHITECT'S DEMOLITION PLAN FOR REMOVAL OF EXISTING FIXTURES AND FITTINGS. THE REMOVAL OF EXISTING PLUMBING FIXTURES SHALL INCLUDE ALL ASSOCIATED WASTE AND VENT PIPES, FLOOR DRAINS, WATER SERVICE PIPEWORK BRACKETS, SUPPORTS, ETC AND SEAL OFF EXISTING SERVICES. SEAL OFF AND MAKE GOOD ALL FLOOR, WALL AND ROOF PENETRATIONS.
- THE LOCATION OF EXISTING SERVICES WHERE SHOWN ARE APPROXIMATE ONLY AND SHALL BE CONFIRMED ON SITE. WHERE POSSIBLE, DETERMINE LOCATION OF EXISTING POWER, TELSTRA, WATER AND DRAINAGE SERVICES PRIOR TO COMMENCING NEW WORK.
- ALL PENETRATIONS THROUGH EXISTING SUSPENDED FLOOR SLABS SHALL BE DRILLED TO LOCATIONS APPROVED BY THE STRUCTURAL ENGINEER. DRILL PILOT HOLE PRIOR TO CORE DRILLING TO ENSURE CLEARANCE OF BEAMS AND OTHER SERVICES IN SLAB. ALL PENETRATIONS SHALL BE CORE DRILLED TO SUIT PIPE SIZE. ALLOWANCE FOR 10 MM CLEARANCES SHALL BE MADE FOR FIRE PROOFING.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE AND SMOKE STOP WALLS. ALL PIPE PENETRATIONS SHALL BE SEALED WITH TWO HOUR FIRE STOP SEALANT. INSTALL FIRE STOP COLLARS TO PVC-U OR DWV PIPEWORK PASSING THROUGH FLOORS AND FIRE WALLS IN ACCORDANCE WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS.
- PROVIDE SERVICE IDENTIFICATION AND DIRECTION OF FLOW MARKERS TO PIPEWORK IN ACCORDANCE WITH AS1345.
- MAKE GOOD ALL DISTURBED SURFACES TO MATCH EXISTING.
- MAINTAIN SERVICES TO EXISTING FIXTURES AT ALL TIMES. WHERE CHANGE OVER IS REQUIRED, LIAISE WITH THE ARCHITECT PRIOR TO THE SHUTTING DOWN OF ANY SERVICE.
- CONTRACTOR TO PROVIDE ALL DOCUMENTS, APPROVALS, CERTIFICATES, WARRANTIES, LOG BOOKS, ETC. UPON COMPLETION OF WORKS TO THE ARCHITECT. ALL FEES AND INSPECTIONS TO BE INCLUDED AND ARRANGED BY THE CONTRACTOR.
- REFER TO THE ARCHITECT'S DRAWINGS FOR SANITARY FIXTURE AND TAP SELECTIONS. SUPPLY AND FIX ACCESSORIES NECESSARY FOR THE CORRECT INSTALLATION OF THE FIXTURES AND EQUIPMENT.

TASWATER NOTES:

- ALL WORKS OUTSIDE OF THE PROPERTY BOUNDARY WILL BECOME TASWATER ASSETS.
- ENSURE ALL WORKS ARE INSTALLED IN ACCORDANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS NOTED WITHIN THE DRAWINGS AND ISSUED PERMITS.
- ALLOW TO ORGANISE ALL APPLICATIONS TO UNDERTAKE TASWATER WORKS AS NOTED IN THE APPROVAL DOCUMENTS AND UNDERTAKE ALL REQUIRED INSPECTIONS DURING CONSTRUCTION.
- ALL WORKS ASSOCIATED WITH PUBLIC SEWER AND WATER IS TO BE CARRIED OUT IN ACCORDANCE WITH THE WSA PARTS 02 & 03 (WATER AND SEWERAGE CODES OF AUSTRALIA) AND TO THE SATISFACTION OF TASWATER.
- ALL CONNECTIONS TO EXISTING MAINS TO BE CARRIED OUT BY THE REGULATING AUTHORITY AT COST TO BUILDER UNLESS APPROVED OTHERWISE.

			DRAWN:	SL
			CHECKED:	TW
			DESIGN:	SL
B	PLANNING APPROVAL	05/11/2021	DESIGN CHECK:	TW
A	PLANNING APPROVAL	18/10/2021	CERTIFIER:	
REV	DESCRIPTION	DATE	APPROVAL	



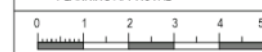
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PROJECT: HARRIS RESIDENCE

ISSUE: PLANNING APPROVAL



SHEET: ENGINEERING NOTES

SCALE:

PROJECT No: 21E29-5

TOTAL SHEETS: 9

SHEET No: H0.02

SIZE: A3

REV No: B

WORKPLACE HEALTH AND SAFETY NOTES

GENERAL

- THE FOLLOWING RISK MITIGATION NOTES HAVE BEEN PREPARED TO ADVISE THE PERSON CONDUCTING A BUSINESS OR UNDERTAKING (POBU) ON THE HEALTH AND SAFETY ASPECTS OF THE DESIGN IN ACCORDANCE WITH THE WORK HEALTH AND SAFETY ACT 2011 AND ARE PERTINENT TO ANY TIME WHEN THE BUILDING OPERATES AS A WORKPLACE.
- THESE NOTES MAY NOT NECESSARILY ACCOUNT FOR ALL CONSTRUCTION, OPERATION, MAINTENANCE AND DEMOLITION PRACTICES AND SAFETY RISKS. INCLUSION OR EXCLUSION OF ANY ITEM DOES NOT INVOLVE THE OWNER, CONTRACTOR, USER, MAINTAINER OR DEMOLISHER OF THEIR OBLIGATIONS TO UNDERTAKE APPROPRIATE RISK MANAGEMENT ACTIVITIES AND IT IS NOT AN ADMISION THAT ANY ITEM BELOW IS THE RESPONSIBILITY OF ALDAMARK.
- ADDITIONAL GUIDANCE ON WORKPLACE HEALTH AND SAFETY IS PROVIDED IN THE FOLLOWING CODES OF PRACTICE, WHICH THE CONTRACTOR IS TO COMPLY WITH AS APPLICABLE:
 - 'CONSTRUCTION WORK' (CP104);
 - 'HOW TO MANAGE WORK HEALTH AND SAFETY RISKS' (CP112);
 - 'MANAGING THE WORK ENVIRONMENT AND FACILITIES' (CP124);
 - 'SAFE DESIGN OF STRUCTURES' (CP127).
- FURTHER ADDITIONAL AND UPDATED CODES OF PRACTICE AND OTHER GUIDANCE MATERIALS FOR THE MINIMISATION OF RISKS TO WORKPLACE HEALTH AND SAFETY ARE MADE AVAILABLE PERIODICALLY FROM WORKSAFE TASMANIA AT WWW.WORKSAFE.TAS.GOV.AU AND SAFE WORK AUSTRALIA AT WWW.SAFEWORAUSTRALIA.GOV.AU AND SHOULD BE CONSULTED PRIOR TO WORKS COMMENCING ON SITE.
- WHERE APPLICABLE, THE SPECIFIC RISKS ASSOCIATED WITH THIS PROJECT HAVE BEEN ASSESSED AND ARE SUMMARISED IN THE ATTACHED RISK ASSESSMENT / HAZARD IDENTIFICATION REPORT.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ALL ASSOCIATED RISKS OF THE CONSTRUCTION PROCESS AND TO PREPARE ADEQUATE SAFE WORK METHOD STATEMENTS AND JOB SAFETY ANALYSIS.
- TEMPORARY STRUCTURES AND CONTRACTOR ERECTION PROCEDURES ARE ONLY INDICATED WHERE DETAILLED PROCEDURES MUST BE SOUGHT PRIOR TO WORKS COMMENCING. FOR ALL ASSOCIATED TEMPORARY STRUCTURE OR ERECTION DESIGN AND CERTIFICATION THE CONTRACTOR IS TO ENGAGE A THIRD PARTY TO ASSIST, CERTIFY AND OVERSEE THE ERECTION OF THE WORKS.

SITE

RUPTURE OF SERVICES DURING EXCAVATION FOR OTHER ACTIVITY CREATES A VARIETY OF RISKS INCLUDING RELEASE OF HAZARDOUS MATERIAL. EXISTING SERVICES MAY BE LOCATED ON OR AROUND THE BUILDING SITE. WHERE KNOWN, THESE ARE IDENTIFIED ON THE DRAWINGS; HOWEVER THE EXACT LOCATION AND EXTENT OF SERVICES MAY VARY FROM THAT INDICATED. SERVICES SHOULD BE LOCATED USING AN APPROPRIATE SERVICE APPROPRIATE EXCAVATION PRACTICE SHOULD BE USED AND, WHERE NECESSARY, SPECIALIST CONTRACTORS SHOULD BE ENGAGED.

SITE ACCESS / TRAFFIC MANAGEMENT

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE 'TRAFFIC MANAGEMENT IN WORKPLACES' STANDARD CONTROL.
- ESPECIALLY FOR BUILDINGS ON A MAJOR, NARROW, OR STEEPLY INCLINED ROAD, PARKING OF VEHICLES OR LOADING / UNLOADING OF VEHICLES ON THE ROADWAY MAY CAUSE A TRAFFIC HAZARD. DURING CONSTRUCTION, MAINTENANCE OR DEMOLITION OF THE BUILDING, DESIGNATED PARKING FOR WORKERS AND LOADING AREAS SHOULD BE PROVIDED. FOR ALL BUILDINGS A TRAFFIC MANAGEMENT PLAN SUPERVISED BY TRAINED TRAFFIC MANAGEMENT PERSONNEL SHOULD BE IMPLEMENTED FOR THE WORK SITE.
- PUBLIC ACCESS TO CONSTRUCTION AND DEMOLITION SITES AND TO AREAS UNDER MAINTENANCE CAUSES RISK TO WORKERS AND THE PUBLIC. WARNING SIGNS AND SECURE BARRIERS TO UNAUTHORISED ACCESS SHOULD BE PROVIDED WHERE ELECTRICAL INSTALLATIONS, EXCAVATIONS, PLANT OR LOOSE MATERIALS ARE PRESENT. THEY SHOULD BE SECURED WHEN NOT FULLY SUPERVISED.
- BUILDING OWNERS AND OCCUPERS SHOULD MONITOR THE PEDESTRIAN ACCESS WAYS AND, IN PARTICULAR, ACCESS TO AREAS WHERE MAINTENANCE IS ROUTINELY CARRIED OUT, TO ENSURE THAT SURFACES HAVE NOT MOVED OR CRACKED SUCH THAT THEY BECOME UNEVEN AND PRESENT A TRIP HAZARD. SPILLS, LOOSE MATERIAL, STRAY OBJECTS OR ANY OTHER MATTER THAT MAY CAUSE A SLIP OR TRIP HAZARD SHOULD BE CLEANED OR REMOVED FROM ACCESS WAYS.
- CONTRACTORS SHOULD BE REQUIRED TO MAINTAIN A TIDY WORK SITE DURING CONSTRUCTION, MAINTENANCE OR DEMOLITION TO REDUCE RISK OF TRIPS AND FALLS IN THE WORKPLACE. MATERIALS FOR CONSTRUCTION OR MAINTENANCE SHOULD BE STORED IN DESIGNATED AREAS AWAY FROM ACCESS WAYS AND WORK AREAS.
- CONSTRUCTION OF BUILDING ELEMENTS THAT ARE NECESSARY TO CONTRIBUTE TO SAFE ACCESS TO THE BUILDING, SUCH AS HANDRAILS, SCAFFOLDING, ACCESS STAIRS, LIFT ARREST SYSTEMS ETC., MUST TAKE PLACE PRIOR TO PROGRESSING WITH ANY OTHER WORKS FOR WHICH THOSE ELEMENTS WILL BE REQUIRED.

WATER

- IF THE BUILDING SITE IS ADJACENT TO ANY BODY OF WATER ADEQUATE PROTECTION AND ACCESS PREVENTION SHALL BE PROVIDED. THE CONTRACTOR IS TO PREPARE A SAFE WORK METHOD STATEMENT FOR ANY WORKS REQUIRED TO BE UNDERTAKEN OVER WATER.

LIGHTING AND VENTILATION

- THE CONTRACTOR IS TO PROVIDE ADEQUATE LIGHTING AND VENTILATION TO ALL AREAS REQUIRED TO BE OCCUPIED BY WORKERS DURING CONSTRUCTION. PRIOR TO THE COMMISSIONING OF THE BUILDING, FINAL LIGHTING AND VENTILATION MUST BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE B.C.A.

FIRE AND EMERGENCY

- ADEQUATE SITE SPECIFIC FIRE EQUIPMENT AND EMERGENCY EVACUATION PROCEDURES ARE TO BE PROVIDED AND MAINTAINED BY THE CONTRACTOR DURING WORKS ON SITE ACCORDING TO A SAFE WORK METHOD STATEMENT TO BE PREPARED BY THE CONTRACTOR PRIOR TO WORKS COMMENCING ON SITE. PRIOR TO THE COMMISSIONING OF THE BUILDING, FINAL FIRE PROTECTION EQUIPMENT SHALL BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE B.C.A.

ELECTRICAL

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODES OF PRACTICE 'WORKING IN THE VICINITY OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES' AND 'MANAGING ELECTRICAL RISKS IN THE WORKPLACE' (CP117) AND AS 3012 STANDARD CONTROLS.
- UNDERGROUND POWER LINES MAY BE LOCATED IN OR AROUND THE SITE. ALL UNDERGROUND POWER LINES MUST BE ACCURATELY LOCATED AND EITHER DISCONNECTED OR ADEQUATE EXCLUSION ZONES DELINEATED PRIOR TO ANY CONSTRUCTION, MAINTENANCE OR DEMOLITION WORK COMMENCING.
- OVERHEAD POWER LINES MAY BE LOCATED ON OR NEAR THE SITE. THESE POSE A SIGNIFICANT RISK IF STRUCK OR APPROACHED BY LIFTING DEVICES OR OTHER PLANT AND PERSONS WORKING ABOVE GROUND LEVEL WHERE THERE IS A DANGER OF THIS OCCURRING. POWER LINES SHOULD BE, WHERE PRACTICAL, DISCONNECTED OR RELOCATED. WHERE NOT PRACTICAL, CLEARLY IDENTIFIED EXCLUSION ZONES AND APPROACH DISTANCES SHALL BE ESTABLISHED AND MAINTAINED.

EXCAVATION

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE 'EXCAVATION WORK' (CP107) STANDARD CONTROL.
- CONSTRUCTION OF THE BUILDING AND SOME MAINTENANCE ON THE BUILDING MAY REQUIRE EXCAVATION AND INSTALLATION OF ITEMS WITHIN THE EXCAVATION. WHERE PRACTICAL, INSTALLATION SHOULD BE CARRIED OUT USING METHODS THAT DO NOT REQUIRE WORKERS TO ENTER THE EXCAVATION WHERE THIS IS NOT PRACTICAL, ADEQUATE SUPPORT FOR THE EXCAVATED AREA SHALL BE PROVIDED TO PREVENT COLLAPSE. WARNING SIGNS AND BARRIERS TO PREVENT ACCIDENTAL OR UNAUTHORISED ACCESS TO ALL EXCAVATIONS SHALL BE PROVIDED.
- ANY AVOIDING PROCEDURES MAY CAUSE A RISK OF FALLING INTO OPEN BORES. ALL BORES THEREFORE ARE TO BE CONCRETE FILLED AS SOON AS POSSIBLE. IN THE MEANTIME, ADEQUATE PROTECTION AND ACCESS PREVENTION SHALL BE PROVIDED.
- THE CONTRACTOR IS TO CONSULT ANY SITE INVESTIGATION REPORTS ETC. BEFORE CONDUCTING ANY EXCAVATION WORKS. IN THE CASE OF ANY AREAS BEING IDENTIFIED AS HAVING GROUND CONTAMINANTS PRESENT, A QUALIFIED SPECIALIST CONSULTANT SHALL BE ENGAGED TO PROVIDE REMEDIAL WORKS DESIGN AND RISK MITIGATION STRATEGIES.

CONSTRUCTION

FORMWORK

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE 'FORMWORK AND FALSEWORK' STANDARD CONTROL.
- ALL FORMWORK AND SUPPORTING SCAFFOLD STRUCTURES MUST BE DESIGNED TO CARRY THE CONSTRUCTION LOADING SPECIFIED WITH THIS SET OF DOCUMENTATION.
- NOTES: FORMWORK E.G. KRONEN / CONCREX MUST BE INSTALLED TO MANUFACTURERS INSTRUCTIONS AND SUPPORTED DURING CONSTRUCTION AS RECOMMENDED. TEMPORARY SUPPORTS ARE NOT PROVIDED AS PART OF THIS DOCUMENTATION.
- SLABS THAT SUPPORT CONTINUED TEMPORARY STRUCTURE MUST BE BACK PROPPED. BACK PROPPING MUST BE CHECKED AND APPROVED PRIOR TO ANY ADDITIONAL CONSTRUCTION LOADING.
- WALLS, COLUMN AND OTHER VERTICAL FORMWORK MUST BE CHECKED AND DESIGNED FOR POTENTIAL HYDROSTATIC LOADING DURING CONCRETE PLACEMENT.

PRECAST PANEL ERECTION

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE 'PRECAST TILT UP AND CONCRETE ELEMENTS IN BUILDING CONSTRUCTION' AND AS 3550 STANDARD CONTROLS.
- CONTRACTOR IS TO ENSURE THAT CRANE SIZE AND LOCATION IS ADEQUATELY ASSESSED FOR CAPACITY BEFORE PANELS ARE ERECTED. THIS IT TO INCLUDE BUT IS NOT LIMITED TO CRANE SUPPORT BEARING, LOCATION OF UNDERGROUND SERVICES, OVERTURNING, LIFTING CAPACITY, OVERHEAD OBSTRUCTIONS AND TRAFFIC HAZARDS.
- CHAIN AND SLING SETUP FOR PANELS IS TO BE CHECKED AGAINST APPROVED PANEL LIFTING POINTS. WHERE APPROPRIATE AN APPROVED SPREADER BEAM IS TO BE USED.
- PATHWAYS OF OVERHEAD TRAVEL OF PANELS ARE TO BE CLEARLY MARKED AND ACCESS TO THESE RESTRICTED DURING LIFTING.
- PANEL BEARING AND LOCATING PLATES AND DOWELS ARE TO BE CHECKED FOR FINAL LOCATION.
- PANEL PROPPING AND TEMPORARY SUPPORT MUST BE LOCATED WITH APPROVED ANCHORS AND APPROPRIATE CHECKS AND DESIGNS FOR CAPACITY, NUMBER AND CONFIGURATION OF PROPS IS TO BE CONDUCTED PRIOR TO ERECTION. TEMPORARY SUPPORTING STRUCTURE DURING CONSTRUCTION IS NOT PROVIDED AS PART OF THESE DESIGN DOCUMENTS AND MUST BE OBTAINED PRIOR TO ERECTION.

STRUCTURAL STEEL ERECTION

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODES OF PRACTICE 'WELDING PROCESSES' (CP134), 'ABRASIVE BLASTING' (CP101) AND 'SPRAY PAINTING AND POWDER COATING' (CP131) STANDARD CONTROLS.
- CONTRACTOR IS TO ENSURE THAT CRANE SIZE AND LOCATION IS ADEQUATELY ASSESSED FOR CAPACITY BEFORE THE FRAME IS ERECTED. THIS IT TO INCLUDE BUT IS NOT LIMITED TO CRANE SUPPORT BEARING, LOCATION OF UNDERGROUND SERVICES, OVERTURNING, LIFTING CAPACITY, OVERHEAD OBSTRUCTIONS AND TRAFFIC HAZARDS.
- CHAIN AND SLING SETUP FOR FRAMING MEMBERS IS TO BE CHECKED AGAINST APPROVED LIFTING POINTS. WHERE APPROPRIATE AN APPROVED SPREADER BEAM IS TO BE USED.
- PATHWAYS OF OVERHEAD TRAVEL OF FRAMING MEMBERS ARE TO BE CLEARLY MARKED AND ACCESS TO THESE RESTRICTED DURING LIFTING.
- TEMPORARY PROPPING WORK IS TO BE PROVIDED TO ENSURE STABILITY OF THE FRAMES DURING ERECTION. ALL STEEL FRAMES ARE TO BE TEMPORARY BRACED, UNTIL STRUCTURE IS FULLY ERECTED AND ALL CONNECTIONS BOLTED OR WELDED TOGETHER AS REQUIRED. TEMPORARY SUPPORTING STRUCTURE DURING CONSTRUCTION IS NOT PROVIDED AS PART OF THESE DESIGN DOCUMENTS AND MUST OBTAINED PRIOR TO ERECTION.
- SITE BASED TREATMENTS OF STEEL FRAMING MEMBERS (E.G. CUTTING, WELDING, GRIT BLASTING, SPRAY PAINTING ETC.) IS TO BE MINIMISED WHEREVER POSSIBLE. IF SITE BASED TREATMENT IS UNAVOIDABLE, ADEQUATE PROTECTION, SCREENING AND VENTILATION TO MINIMISE HAZARDS TO PERSONNEL IS TO BE PROVIDED.
- AVOID SITE BASE HOT WORKS WHERE POSSIBLE. IF UNAVOIDABLE, SITE SPECIFIC PROCEDURES FOR HOT WORKS PERMITS ETC. ARE TO BE FOLLOWED.

WORKING AT HEIGHTS

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODES OF PRACTICE 'MANAGING THE RISK OF FALLS AT WORKPLACES' (CP122), 'PREVENTING FALLS IN HOUSING CONSTRUCTION' (CP127), 'SCAFFOLDS AND SCAFFOLDING WORK' AND AS 1657 STANDARD CONTROLS.
- SCAFFOLDING MUST BE SECURED AND BRACED TO RESIST OVERTURNING. SINGLE PROPS MUST NOT BE USED UNLESS A DESIGN CHECK ON STABILITY IS MADE AND THEY ARE FIXED TO A STABLE BASE AT MOMENTS.
- CONTRACTOR IS TO USE PASSIVE FALL PREVENTION DEVICE IF POSSIBLE (IE. FIXED PLATFORM, CHERRY PICKERS ETC.).

CONCRETE STRESSING

- CONTRACTOR IS TO ENSURE THAT CONCRETE STRENGTH MEETS REQUIRED CAPACITY AT TIME OF STRESSING.
- RESTRICTED STRESSING AREAS ARE TO BE PROVIDED TO ALL AREAS WHERE STRESSING IS TAKING PLACED BOTH AT LIVE AND DEAD ENDS OF STRESSING DUCTS.
- CONTRACTOR MUST ENSURE THAT AT ALL TIMES DURING STRESSING ONLY QUALIFIED AND APPROVED PERSONNEL HAVE ACCESS TO DESIGNATED STRESSING AREAS.
- SLABS THAT SUPPORT CONTINUED TEMPORARY STRUCTURE MUST BE BACK PROPPED. BACK PROPPING MUST BE CHECKED AND APPROVED PRIOR TO ANY ADDITIONAL CONSTRUCTION LOADING.

CRANES AND OTHER MECHANICAL PLANT

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODES OF PRACTICE 'CRANES' MANAGING THE RISKS OF PLANT IN THE WORKPLACE' (CP123), 'INDUSTRIAL LIFT TRUCKS' AND AS 2550 STANDARD CONTROLS.
- MECHANICAL LIFTING OF MATERIALS AND COMPONENTS DURING CONSTRUCTION, MAINTENANCE OR DEMOLITION PRESENTS A RISK OF FALLING OBJECTS. CONTRACTORS SHOULD ENSURE THAT APPROPRIATE LIFTING DEVICES ARE USED, THAT LOADS ARE PROPERLY SECURED, AND THAT ACCESS TO AREAS BELOW THE LOAD IS PREVENTED OR RESTRICTED.
- CONTRACTOR IS TO ENSURE THAT CRANE SIZE AND LOCATION IS ADEQUATELY ASSESSED FOR CAPACITY BEFORE ANY LIFT. THIS IT TO INCLUDE BUT IS NOT LIMITED TO CRANE SUPPORT BEARING, LOCATION OF UNDERGROUND SERVICES, OVERTURNING, LIFTING CAPACITY, OVERHEAD OBSTRUCTIONS AND TRAFFIC HAZARDS.

EXISTING BUILDINGS

DEMOLITION

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE 'DEMOLITION WORK' (CP106) STANDARD CONTROL.
- LOCATIONS OF EXISTING EMBEDDED LIVE SERVICES ARE TO BE ACCURATELY ESTABLISHED PRIOR TO ANY PENETRATION OF EXISTING STRUCTURE.
- DO NOT CUT OR REMOVE ANY STRUCTURAL MEMBER PRIOR TO INSPECTION BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER.
- SEEK ADVICE FROM A SUITABLY QUALIFIED STRUCTURAL ENGINEER PRIOR TO CORING, CHASING, CUTTING OR REMOVAL OF EXISTING CONCRETE AND REINFORCEMENT.

EXISTING STRUCTURAL ADEQUACY

- WHERE EXISTING STRUCTURAL ELEMENTS ARE DAMAGED OR EXHIBIT SIGNIFICANT SECTION LOSS, A SUITABLY QUALIFIED STRUCTURAL ENGINEER SHALL BE ENGAGED TO DESIGN A SYSTEM FOR STABILISING / SUPPORTING THE EXISTING STRUCTURE, SUCH THAT ALL WORK AREAS WILL BE ADEQUATELY SAFE FOR BUILDING WORKS TO COMMENCE. ANY SIGNIFICANT SECTION LOSS OR CORROSION OF EXISTING STRUCTURAL ELEMENTS SHALL BE REPORTED TO THE ENGINEER PRIOR TO PROCEEDING WITH WORKS.
- ANY EXISTING RETAINING STRUCTURES PRESENT ON THE SITE SHALL BE INSPECTED BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER TO ASCERTAIN THE EXTENT OF ANY EXCLUSION ZONES REQUIRED, ESPECIALLY WITH REGARD TO ANY EXCAVATION, THE OPERATION OF HEAVY SURFACE PLANT AND EQUIPMENT, OR STOCKPILING MATERIAL ADJACENT TO EXISTING RETAINING STRUCTURES.
- NO EXCAVATION SHALL BE PERFORMED ADJACENT TO ANY EXISTING STRUCTURE, ESPECIALLY BELOW THE 45° 45° LINE FROM THE UNDERLIE OF AN EXISTING FOOTING WITHOUT THE EXPRESS PERMISSION OF THE STRUCTURAL ENGINEER.

ASBESTOS

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODES OF PRACTICE 'HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE' (CP111) AND 'HOW TO SAFELY REMOVE ASBESTOS' (CP115) STANDARD CONTROLS.
- FOR ALTERATIONS TO OR DEMOLITION OF A BUILDING CONSTRUCTED PRIOR TO 1990, IF THE BUILDING WAS CONSTRUCTED PRIOR TO:
 - 1990 - IT MAY CONTAIN ASBESTOS.
 - 1986 - IT IS LIKELY TO CONTAIN ASBESTOS.
 EITHER IN CLADDING MATERIAL OR IN FIRE-RETARDANT INSULATION MATERIAL. IN EITHER CASE, THE BUILDER SHOULD INSPECT AND, IF NECESSARY, HAVE ANY ASBESTOS REMOVED BY A SUITABLE QUALIFIED PERSON BEFORE DEMOLISHING, CUTTING, SANDING, DRILLING OR OTHERWISE DISTURBING THE EXISTING STRUCTURE.

EXISTING COATINGS

- PRIOR TO ANY WORKS COMMENCING AN APPROPRIATE METHOD OF PAINT REMOVAL AND DISPOSAL IS TO BE DETERMINED, PARTICULARLY ON HISTORIC STRUCTURES. COATINGS CONTAINING COAL TAR EPOXIES, BITUMEN AND ASPHALTS, ZINC CHROMATE AND LEAD AMONG OTHERS PRESENT A HEALTH RISK. ADEQUATE SCREENING IS TO BE PROVIDED TO THE PUBLIC AND THE SURROUNDING ENVIRONMENT DURING PAINT REMOVAL AND CLEANING OPERATIONS. ENVIRONMENTALLY APPROPRIATE METHODS ARE TO BE EMPLOYED DURING MAINTENANCE AND REPAIR WORK.

HAZARDOUS SUBSTANCES

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE 'MANAGING RISKS OF HAZARDOUS CHEMICALS IN THE WORKPLACE' (CP120) STANDARD CONTROL.

POWDERED MATERIALS

- MANY MATERIALS USED IN CONSTRUCTION CAN CAUSE HARM IF INHALED IN POWDERED FORM. PERSONS WORKING ON OR IN THE BUILDING DURING CONSTRUCTION, OPERATIONAL MAINTENANCE OR DEMOLITION SHOULD ENSURE GOOD VENTILATION AND WEAR PERSONAL PROTECTIVE EQUIPMENT, INCLUDING PROTECTION AGAINST INHALATION WHILE USING POWDERED MATERIAL OR WHEN SANDING, DRILLING, CUTTING OR OTHERWISE DISTURBING OR CREATING POWDERED MATERIAL.

TREATED TIMBER

- THE DESIGN OF THE BUILDING MAY INCLUDE PROVISION FOR INCLUSION OF TREATED TIMBER WITHIN THE STRUCTURE. DUST OR FLAMES FROM THIS MATERIAL CAN BE HARMFUL. PERSONS WORKING ON OR IN THE BUILDING DURING CONSTRUCTION, OPERATIONAL MAINTENANCE OR DEMOLITION SHOULD ENSURE GOOD VENTILATION AND WEAR PERSONAL PROTECTIVE EQUIPMENT, INCLUDING PROTECTION AGAINST INHALATION OF HARMFUL MATERIAL WHEN SANDING, DRILLING, CUTTING OR USING TREATED TIMBER IN ANY WAY THAT MAY CAUSE HARMFUL MATERIAL TO BE RELEASED. DO NOT BURN TREATED TIMBER.

VOLATILE ORGANIC COMPOUNDS

- MANY TYPES OF GLUES, SOLVENTS, SPRAY PACKS, PAINTS, VARNISHES AND SOME CLEANING MATERIALS AND DISINFECTANTS HAVE DANGEROUS EMISSIONS. AREAS WHERE THESE ARE USED SHOULD BE KEPT WELL VENTILATED WHILE THE MATERIAL IS BEING USED AND FOR A PERIOD AFTER INSTALLATION. PERSONAL PROTECTIVE EQUIPMENT MAY ALSO BE REQUIRED. THE MANUFACTURERS RECOMMENDATIONS FOR USE MUST BE CAREFULLY FOLLOWED AT ALL TIMES.

SYNTHETIC MINERAL FIBRE

- GLASS FIBRE, ROCK WOOL, CERAMIC AND OTHER MATERIAL USED FOR THERMAL OR ACOUSTIC INSULATION MAY CONTAIN SYNTHETIC MINERAL FIBRE WHICH MAY BE HARMFUL IF INHALED, OR IF IT COMES INTO CONTACT WITH THE SKIN, EYES OR OTHER SENSITIVE PARTS OF THE BODY. PERSONAL PROTECTIVE EQUIPMENT, INCLUDING PROTECTION AGAINST INHALATION OF HARMFUL MATERIAL, SHOULD BE USED WHEN INSTALLING, REMOVING OR WORKING NEAR BULK INSULATION MATERIAL.

HAZARDOUS MANUAL TASKS

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE 'HAZARDOUS MANUAL TASKS' (CP110) STANDARD CONTROL.
- COMPONENTS WITHIN THIS DESIGN WITH A MASS IN EXCESS OF 25 KG SHOULD BE LIFTED BY TWO OR MORE WORKERS OR BY A MECHANICAL LIFTING DEVICE. ALL MATERIAL PACKAGING, BUILDING AND MAINTENANCE COMPONENTS SHOULD CLEARLY SHOW THE TOTAL MASS OF PACKAGES AND WHERE PRACTICAL, ALL ITEMS SHOULD BE STORED ON SITE IN A WAY THAT MINIMISES BENDING BEFORE LIFTING. ADVICE SHOULD BE PROVIDED ON SAFE LIFTING METHODS IN ALL AREAS WHERE LIFTING MAY OCCUR.

CONFINED SPACES

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE 'CONFINED SPACES' (CP103) AND AS 2865 STANDARD CONTROLS.
- ENCLOSED SPACES WITHIN THE BUILDING MAY PRESENT A RISK TO PERSONS ENTERING FOR CONSTRUCTION, MAINTENANCE OR ANY OTHER PURPOSE. WHERE WORKERS ARE REQUIRED TO ENTER ENCLOSED SPACES, AIR TESTING EQUIPMENT AND PERSONAL PROTECTIVE EQUIPMENT SHALL BE PROVIDED. ONLY TRAINED PERSONNEL ARE TO ENTER A CONFINED SPACE AND THE CONTRACTOR IS TO PREPARE A WORK METHOD STATEMENT ADDRESSING MITIGATION OF RISKS FOR ANY SUCH WORKS. ADEQUATE SIGNAGE IS TO BE PROVIDED TO ALL TEMPORARY AND PERMANENT CONFINED SPACES IN ACCORDANCE WITH AS 2865.

NOISE

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE 'MANAGING NOISE AND PREVENTING HEARING LOSS AT WORK' (CP116) STANDARD CONTROL.

OPERATIONAL USE OF BUILDING

RESIDENTIAL BUILDINGS

- THIS BUILDING HAS BEEN DESIGNATED AS A RESIDENTIAL BUILDING. IF THE BUILDING, AT A LATER DATE, IS USED OR INTENDED FOR USE AS A WORKPLACE, THE PROVISIONS OF THE WORK HEALTH AND SAFETY ACT 2011 OR SUBSEQUENT REPLACEMENT LEGISLATION SHOULD BE APPLIED TO THE NEW USE.

			DRAWN	SL
			CHECKED	TW
			DESIGN	SL
B	PLANNING APPROVAL	05/11/2021	DESIGN CHECK	TW
A	PLANNING APPROVAL	18/10/2021	CERTIFIER	
REV	DESCRIPTION	DATE	APPROVAL	



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CLIENT: HARRIS
 ADDRESS: 14A LORD STREET
 SANDY BAY TAS 7005

PROJECT: HARRIS RESIDENCE

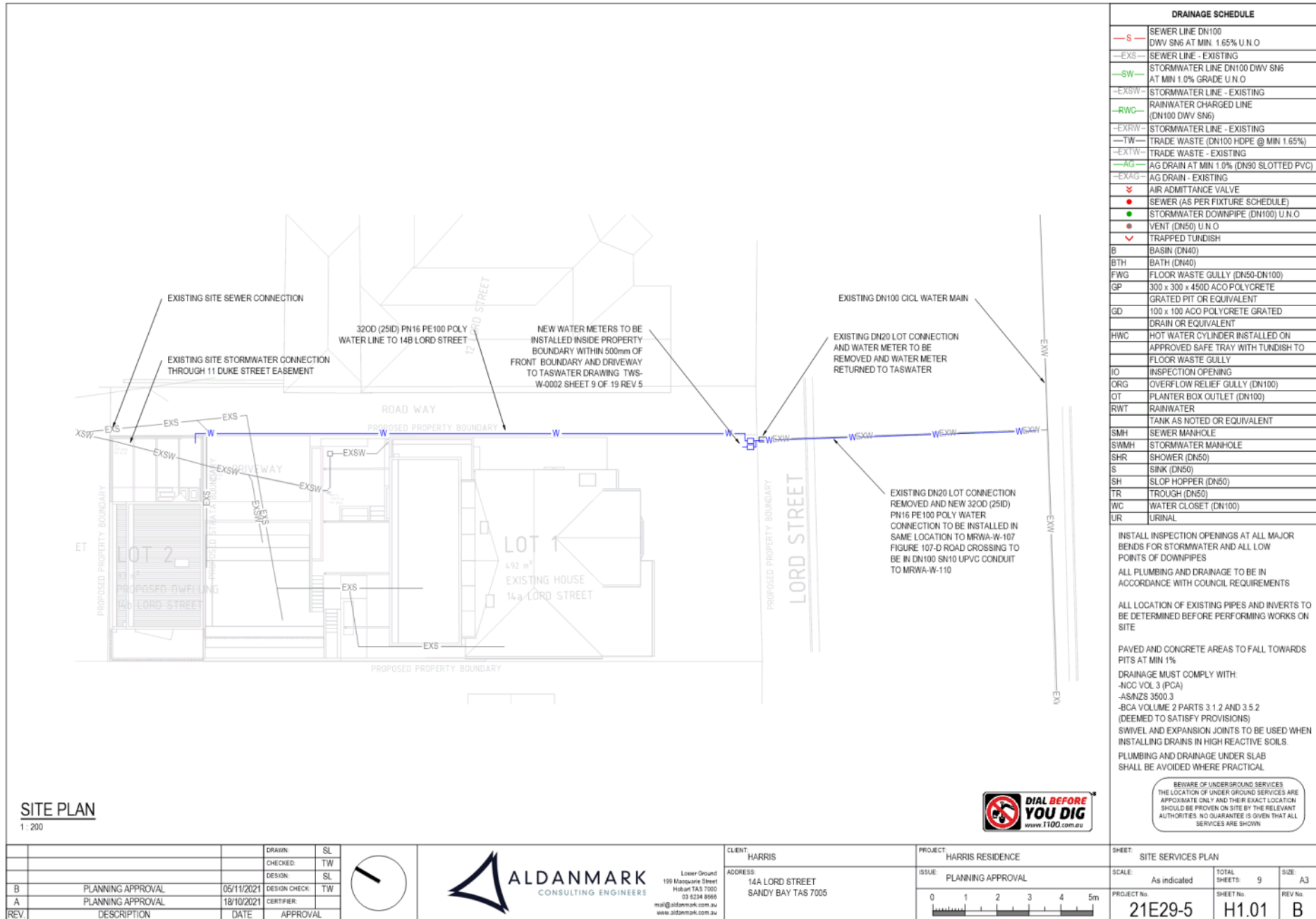
ISSUE: PLANNING APPROVAL

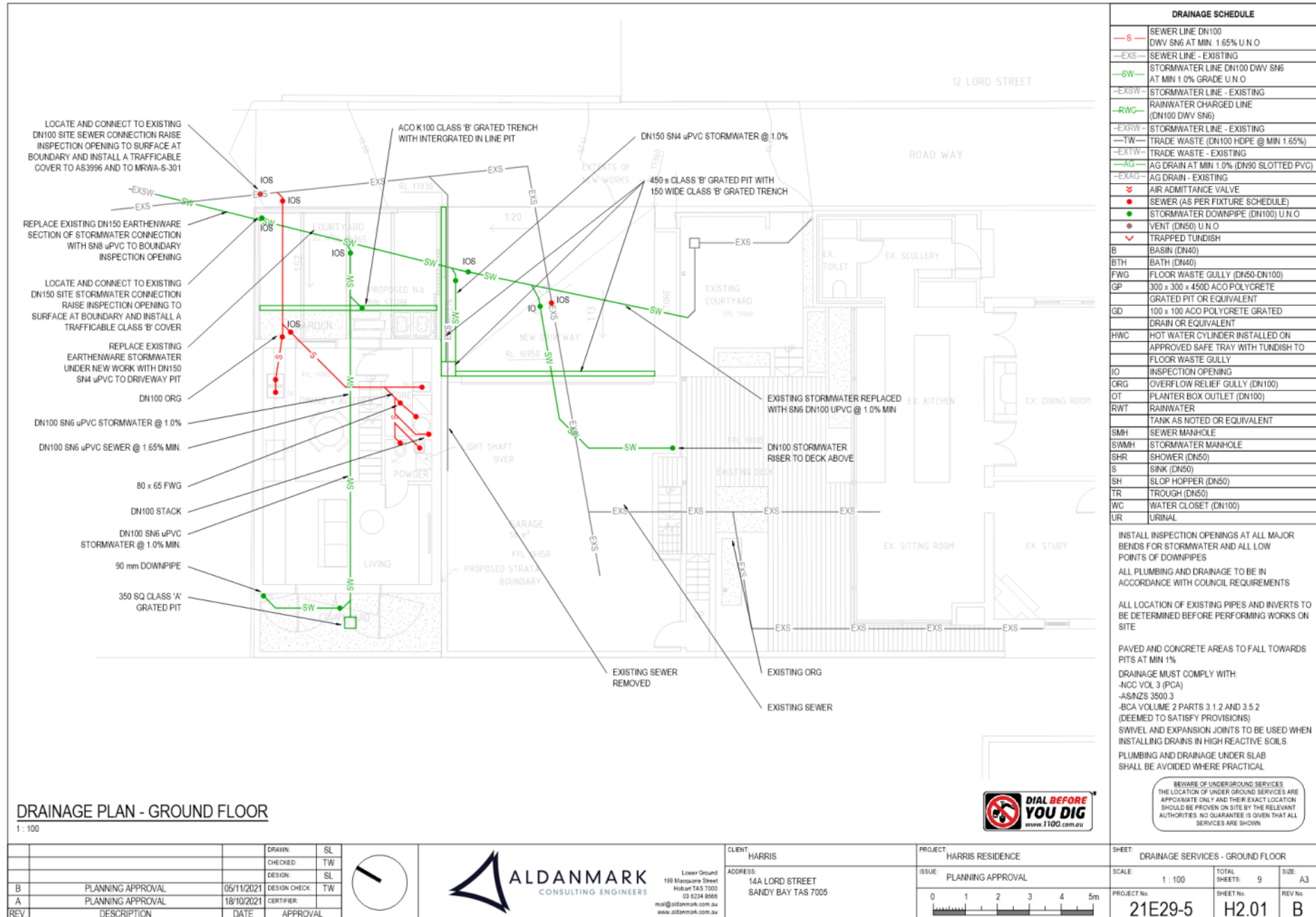


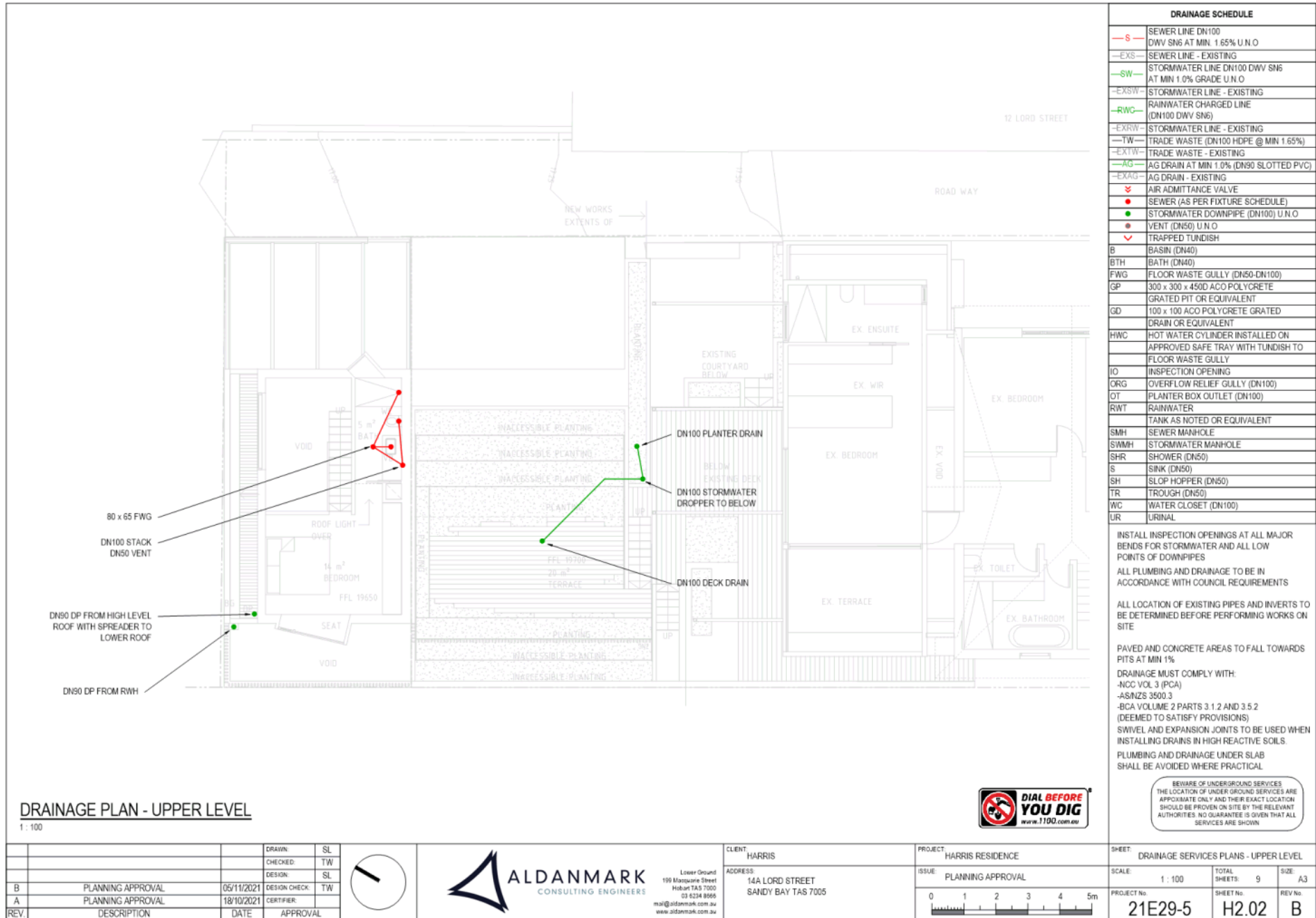
SHEET: WORKPLACE HEALTH & SAFETY NOTES

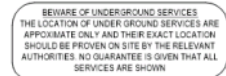
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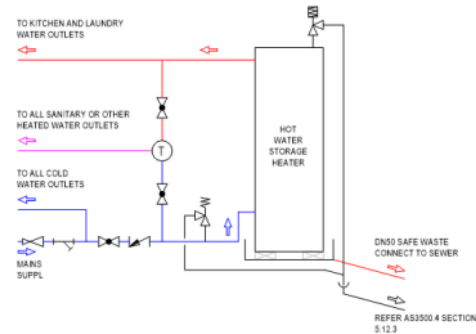
PROJECT No: 21E29-5
 SHEET No: H0.03
 REV No: B





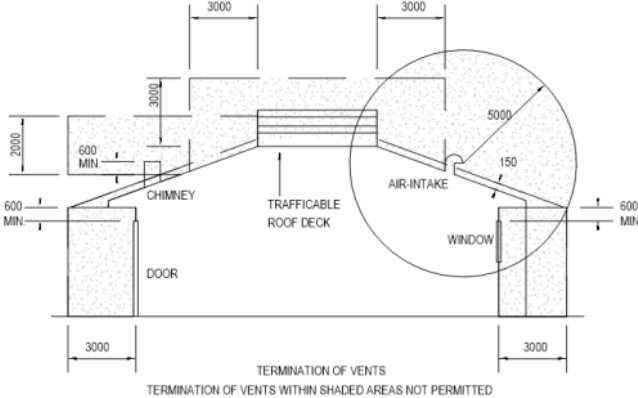




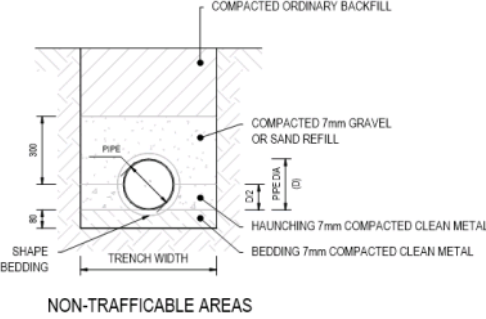


- SCHEMATIC LEGEND**
- ISOLATION VALVE
 - NON-RETURN VALVE
 - PRESSURE REDUCING VALVE
 - STRAINER
 - PRESSURE AND TEMPERATURE RELIEF
 - PRESSURE LIMITING VALVE
 - TEMPERING VALVE

TYPICAL INSTALLATION OF MAINS PRESSURE STORAGE WATER HEATER
1 : 20

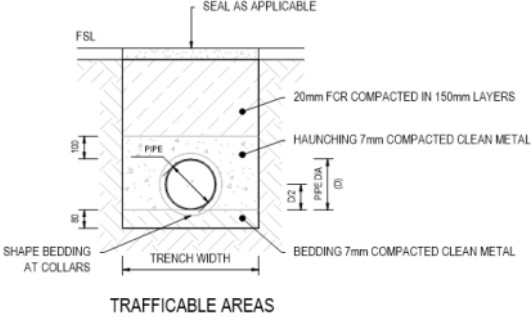


TERMINATION OF VENTS
1 : 100



TRENCH WIDTHS	
PIPE DIAMETER	MIN TRENCH WIDTH
LESS THAN 50mm	250
75 - 100mm	450
150 - 300mm	600
ABOVE 300mm	DIA. PLUS 300mm

TYPICAL PIPE TRENCH DETAILS
1 : 20



INSULATION SCHEDULE

HEATED WATER PIPES
TYPE SIZE RANGE INSULATION
CIRCULATING LINE 25mm ROCKWOOL WITH FOIL WRAP
BRANCH LINE 20-25 19mm FR BRADFLEX
OFFTAKE 18 13mm FR BRADFLEX

COLD WATER PIPES EXPOSED
TYPE SIZE RANGE INSULATION
ALL >20 19mm ZERO-4
OTHER COLD WATER PIPES
TYPE SIZE RANGE INSULATION
ALL ALL NOT REQUIRED

NOTE: WATER PIPES ASSOCIATED DIRECTLY WITH PLANT EQUIPMENT SHALL BE INSULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS FOR A TYPICAL INSTALLATION

HOT AND COLD WATER NOMINAL DIAMETERS

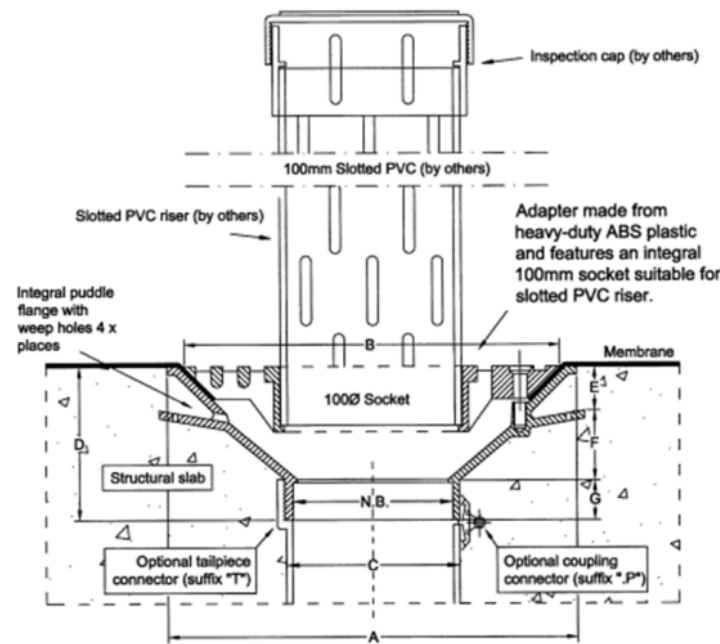
BRANCH OFF TAKES MIN. DN20
MAX OFF TAKE LENGTH 6m DN18
MAX OFF TAKE LENGTH 3m DN15
MAX OFF TAKE LENGTH 1m DN10

COPPER PIPES TO AS1432 (HOT AND COLD)
PE-X PIPES TO AS2492 (HOT AND COLD)
HDPE PIPES TO AS/NZS4130 (COLD ONLY)

		DRAWN: SL			CLIENT: HARRIS	PROJECT: HARRIS RESIDENCE	SHEET: HYDRAULIC DETAILS - 1
		CHECKED: TW			ADDRESS: 14A LORD STREET SANDY BAY TAS 7005	ISSUE: PLANNING APPROVAL	SCALE: 1:100
		DESIGN: SL					TOTAL SHEETS: 9
		DESIGN CHECK: TW					SHEET No. 9
		CERTIFIER: TW					REV No. B
REV	DESCRIPTION	DATE	APPROVAL				

SPS Truflo 100mm & 150mm RWO
with All-purpose Planter Box Adapter

Specification code:
TIA100PB (100mm CI body with planter box insert)
TIA150PB (150mm CI body with planter box insert)



N.B	A	B	C	D	E	F	G	Flow rate* L/S
100	260	240	110	98	28	45	25	n/a
150	260	238	160	90	28	37	25	n/a

			DRAWN:	SL
			CHECKED:	TW
			DESIGN:	SL
B	PLANNING APPROVAL	05/11/2021	DESIGN CHECK:	TW
A	PLANNING APPROVAL	18/10/2021	CERTIFIER:	
REV.	DESCRIPTION	DATE	APPROVAL	



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PROJECT: HARRIS RESIDENCE

ISSUE: PLANNING APPROVAL



SHEET: HYDRAULIC DETAILS - 2

SCALE:

PROJECT No: 21E29-5

TOTAL SHEETS: 9

SHEET No: H4.02

SIZE: A3

REV No: B

16/11/2021

ALDANMARK
CONSULTING ENGINEERS

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ENGINEER'S ADVICE

211116 RFI 21E29-5 HCC RFI

To: Sarah Zehmesiter	Hobart City Council zehmeisters@hobartcity.com.au	Inspection <input type="checkbox"/>
Cc: 1+2 Architecture	1+2 Architecture Pty Ltd mail@1plus2architecture.com	Instruction <input type="checkbox"/>
Ross & Lucy Harris	admin@twoh.com.au	Memo <input type="checkbox"/>
		RFI Response <input checked="" type="checkbox"/>
		Shop Drawing Approval <input type="checkbox"/>

Project: Ross & Lucy Harris: 14b Lord Street, SANDY BAY**Subject:** HCC RFI (HCC Ref: PLN-21-532)**Relevant documents:**

1. Engineering design documents by Aldanmark 21E29-5 H0.01-H0.03, H1.01, H2.01-H2.03, H4.01 & H4.02 rev B 5/11/2021
2. Correspondence from City of Hobart – PLN-21-532 – 14 Lord Street Sandy Bay TAS 7005 – Planning Letter BB Not Satisfied

Dear Sarah

Further to your RFI dated 4th November and telephone conversation with Stuart Lamond (from our office) on Monday 8th November, we would like to formally confirm our response as follows:

TW1: Please find attached updated hydraulic drawings as listed above in point 1. These have been updated in accordance with TW1

SW1: Please find attached updated hydraulic drawings as listed above in point 1. These have been updated in accordance with RFI and latest CCTV survey. Summary of CCTV Survey attached.

SW6: As Stuart discussed with Sarah over there is no change in hard surface areas between the existing and proposed developments and therefore this is not required. Please refer to Architectural documentation for confirmation of existing and proposed areas if required.

Please call if you have any queries.

Regards,



Tim Watson BEng (Hons) MIEAust CPEng NER
Structural Engineer

Notes:

1. Inspections/instructions conducted by Aldanmark are for structural purposes and are not approvals to proceed and do not override the Building Act 2016 requirement for mandatory notification to the Building Surveyor by the Builder or Superintendent for inspection of works in progress and cannot be used as the sole method of assessment to grant approval to proceed.
2. Inspections/instructions by Aldanmark do not include components of the current National Construction Code that are outside the areas of structural engineering.
3. In cases where building approval is required but has not yet been obtained, this advice must not be used as the basis for performing any works until such approvals are in place.
4. Any advice that results in an alteration to certified documentation must be approved by the Superintendent and Building Surveyor prior to carrying out those works. Such advice assumes a nil cost variation and is based on that expectation. The contractor must obtain approval from the Superintendent prior to commencing any of these works.

16/11/2021

211116 RFI 21E29-5 HCC RFI

CCTV Report Summary:

Archers attended this avo and took 2 lots of CCTV footage. The first from the IO at 14a Lord heading toward Duke St, the second from the IO at Duke heading back toward Lord.

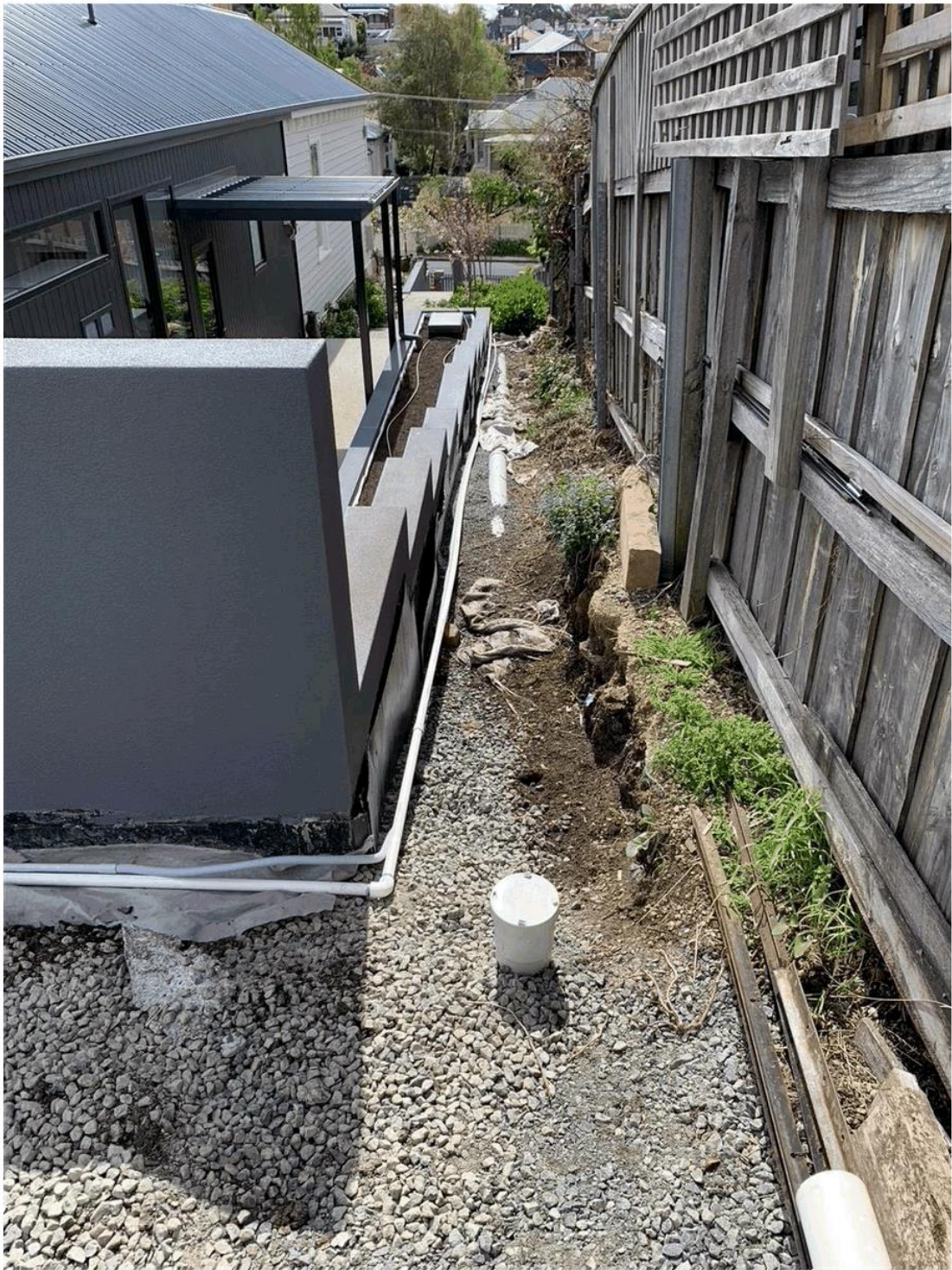
The footage confirmed that the SW pipe runs in a straight line from the IO at 14a Lord to the downpipe on the corner of the carport at 14b Lord and then continues all the way down to the road via an IO at 11 Duke St where it joins the Council SW infrastructure.

Unfortunately we could not get CCTV footage inside the PVC pipe that runs the length of the Duke St property down to the Council junction due to a number of right angles in the newly laid PVC pipe. However, the pipe is currently visible from the surface so I have attached a photograph of this. The length of pipe from the rear boundary of 14b Lord to the Council mains is approx 50m.

As for the materials, an earthenware pipe starts at the IO at 14a Lord and continues all the way to the IO at 11 Duke St. There is a very small section of PVC pipe that has been inserted to allow for the downpipe on the carport at 14b Lord St. There were no cracks or breaks and the earthenware pipe appears in good condition.

16/11/2021

211116 RFI 21E29-5 HCC RFI



16/11/2021

211116 RFI 21E29-5 HCC RFI



16/11/2021

211116 RFI 21E29-5 HCC RFI



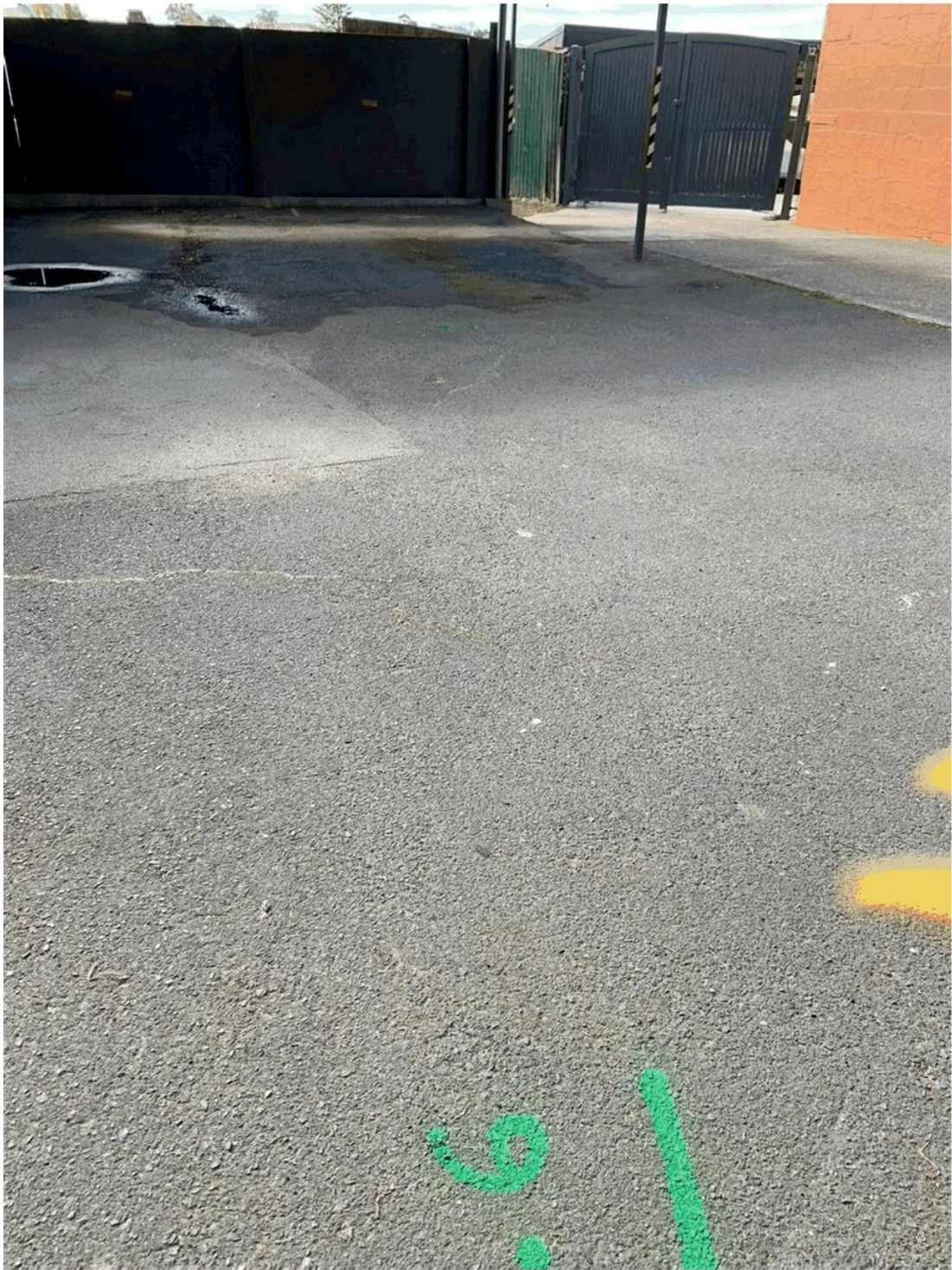
16/11/2021

211116 RFI 21E29-5 HCC RFI



16/11/2021

211116 RFI 21E29-5 HCC RFI



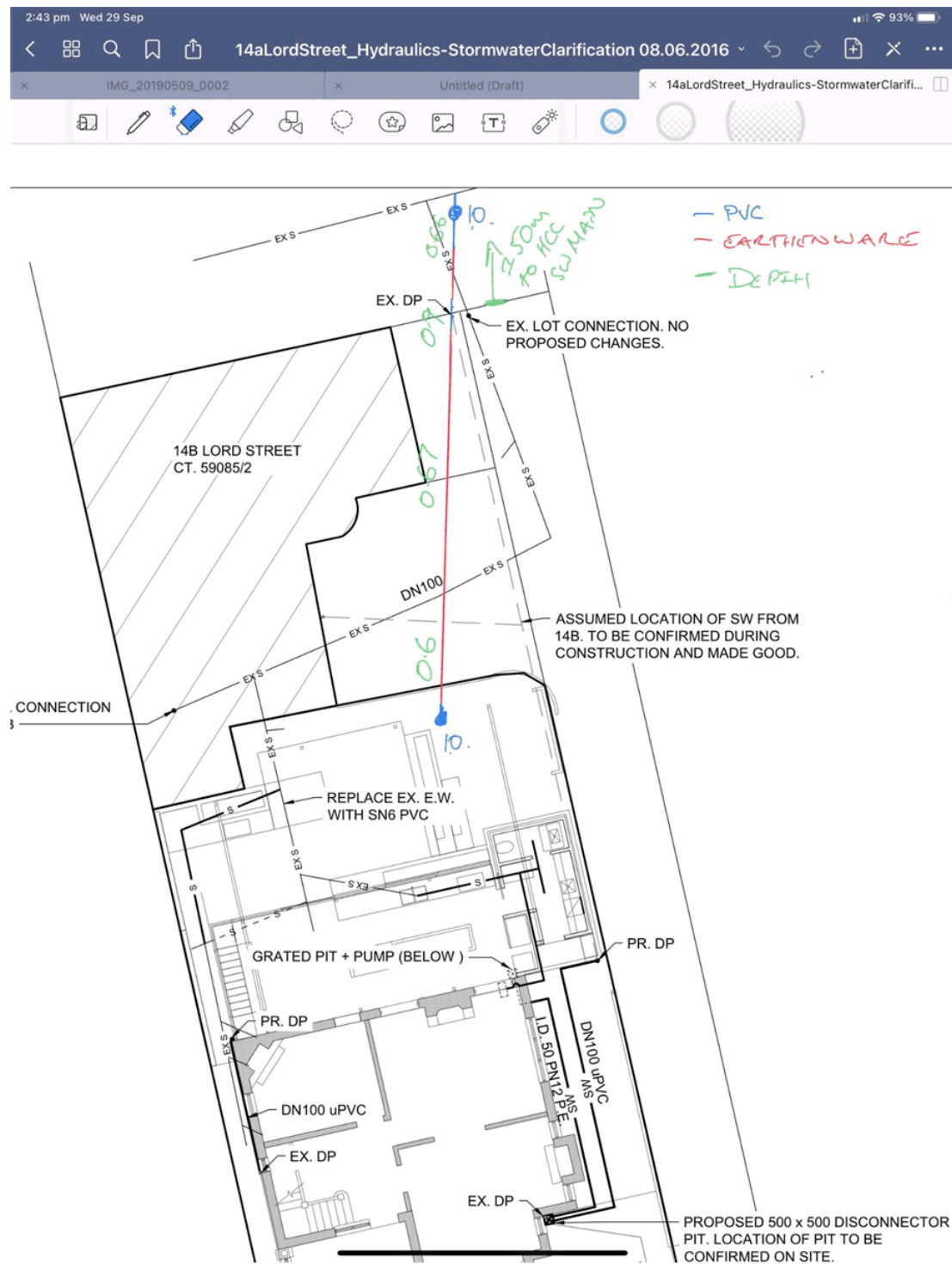
16/11/2021

211116 RFI 21E29-5 HCC RFI



16/11/2021

211116 RFI 21E29-5 HCC RFI



16/11/2021

211116 RFI 21E29-5 HCC RFI



Planning: #238950

Property

1/14 LORD STREET SANDY BAY TAS 7005

People

Applicant

*

1 Plus 2 Architecture Pty. Ltd.
Michael Carlotto
27 Melville Street
HOBART TAS 7000
6234 8122
mail@1plus2architecture.com

Owner

*

Ross and Lucy Harris
14a Lord Street
SANDY BAY TAS 7005
0411140078
lhalmarick@hotmail.com

Entered By

1+2 ARCHITECTURE PTY LTD
31 MELVILLE STREET
HOBART TAS 7000
03 6234 8122
mail@1plus2architecture.com

Use

Multiple dwellings

Details

Have you obtained pre application advice?

☒ Yes

If YES please provide the pre application advice number eg PAE-17-xx

Liaison with Liz Wilson and Meg Baynes from City of Hobart. Russell Dobie from Heritage Tasmania.

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. If you are not the owner of the property you MUST include signed confirmation from the owner that they are aware of this application.

*

☒ No

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the

number of signs under Other Details below.

*

☒ No

If this application is related to an enforcement action please enter Enforcement Number

Details

What is the current approved use of the land / building(s)?

*

Residential

Please provide a full description of the proposed use or development (i.e. demolition and new dwelling, swimming pool and garage)

*

Demolition of existing dwelling, construction of new garage, dwelling and roof garden / terrace.

Estimated cost of development

*

420000.00

Existing floor area (m2)

Proposed floor area (m2)

Site area (m2)

424.00

435.00

575

Carparking on Site

N/A

Total parking spaces

Existing parking spaces

☐ Other (no selection chosen)

3

2

Other Details

Does the application include signage?

*

No

How many signs, please enter 0 if there are none involved in this application?

*

0

Tasmania Heritage Register

Is this property on the Tasmanian Heritage Register?

☒ Yes
Documents**Required Documents**

Title (Folio text and Plan and Schedule of Easements)

*

2016HRAH_CombinedFolioTextPlan.pdf

Plans (proposed, existing)

*

120821_14LordStreet_ArchitectureDrawings.pdf

Covering Letter

120821_14LordStreet_CoverLetter.pdf

Land Survey

913701-A2 Detail.pdf

2H Pty Ltd

PLN-21-532 Attn: Planning Dept

To: CoH Mail, Cc: 1+2 Architecture, 1+2 Architecture

Sent - twoh.com.au 5:55 pm

[Details](#)

Dear Mr Ikin

I refer to your letter of 16 August 2021 regarding the above Planning Application. Please find below my declaration in accordance with S.52 of LUPAA notifying adjoining landowners of my intention for development.

Please be advised that on the afternoon of Friday 13th August 2021, I had a conversation with Wendy Fitzgerald, the homeowner of 12 Lord St, Sandy Bay. I informed her of our intention to submit a DA within the next week for the redevelopment of 1/14 and 2/14 Lord St, Sandy Bay.

During the conversation, I described in detail our proposed development including the nature of the demolition, the new garage proposal with roof-top garden as well as the size of the new 1-bedroom 2-storey apartment that we intend to build.

You may wish to note that this was not the first time our redevelopment has been discussed with Wendy and her husband over the last 4 to 6 months.

Please also be advised that on 18 July 2021, I had a conversation via text message with Scott Lorrington, the owner of 11 Duke St, Sandy Bay. I advised him of our intention to redevelop both 1/14 and 2/14 Lord St including the demolition of the existing building and construction of a new garage and apartment. I also informed Scott of our impending demolition (commencing early 2022) of the existing boundary fence and wall between our 2 properties and our intention to replace it with concrete and blockwork.

Also, on the 17th April 2021, I met with Ben and Ann Swain, owners of 16 Lord St, Sandy Bay. I met with them on their property and advised them of our intention to redevelop the garage and apartment at 1/14 and 2/14 Lord St. I told them that we intended to undertake the demolition in early 2022. From their property, I pointed to where and how the apartment and garage would be constructed as well as describing the new roof-top garden at 1/14 Lord St.

Should you need any further information regarding these conversations, please do not hesitate to contact me.

Regards

Lucy Harris

(resident and owner - 1/14 and 2/14 Lord St)



Lucy Harris
Creative Director
2H Pty Ltd - Construction & Renovation
0411 140 078
admin@twoh.com.au
14A Lord Street, Sandy Bay TAS 7005

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 59085	FOLIO 0
EDITION 3	DATE OF ISSUE 07-Apr-1999

SEARCH DATE : 20-Dec-2019

SEARCH TIME : 08.53 AM

DESCRIPTION OF LAND

City of HOBART

The Common Property for Strata Scheme 59085 (formerly being STR437)

Derivation : Part of 89A-2R-0Ps. Gtd. to W. M. Orr
Prior CT 3529/26SCHEDULE 1

STRATA CORPORATION NO. 59085, 14 LORD STREET, HOBART

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
BENEFITING EASEMENT: full and free right and liberty for
Charles Edward Innes his heirs executors
administrators and assigns his and their tenants
servants and visitors at all times thereafter by day
or by night for all purposes with or without horses
carts carriages waggons or other vehicles of any
description laden or unladen for all purposes
connected with the use and enjoyment of the said land
within described to go pass and repass and to drive
cattle sheep and other animals along over and upon
the strip of land marked B.C.D.E. on Diagram No. 7894.

BENEFITING EASEMENT: a right of way for Florence Mabel West
her heirs executors administrators and assigns with
or without horses carts carriages or waggons laden or
unladen in over along and upon the strip of land
marked A.B.E.F. on Diagram No. 7894.

B398482 APPLICATION TO AMEND STRATUM PLAN. Registered
18-Dec-1990 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Conveyancing and Law of Property Act 1884

STRATUM PLAN

REGISTERED NUMBER

No. 437

Sheet 1 of 3 Sheets

NEW SHEET 1

City or Town HOBART

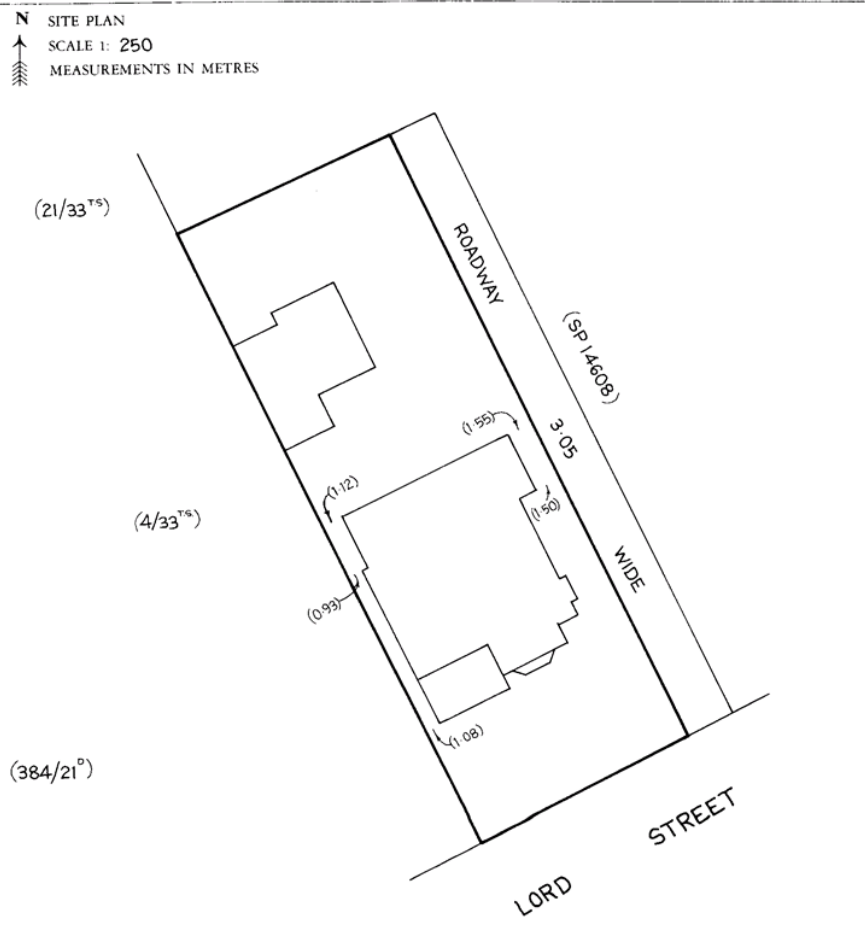
59085

Locality Sandy BayReference to Title C.T.3529-26Site comprises the whole of Lot 1 on Plan No. D7894 in the
~~portion~~
~~Diagram~~

Lands Titles Office

The name of the building is N°14 Lord Street - Hobart

External
surface
boundaries of
the site and
the location of
the building
in relation
thereto to
be delineated
in this space

REGISTERED this day of 19....., No. 437This plan is lodged for registration by
PAGE SEAGER

Recorder of Titles

OS D 754



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Sheet 2 of 3 Sheets

NEW SHEET 2

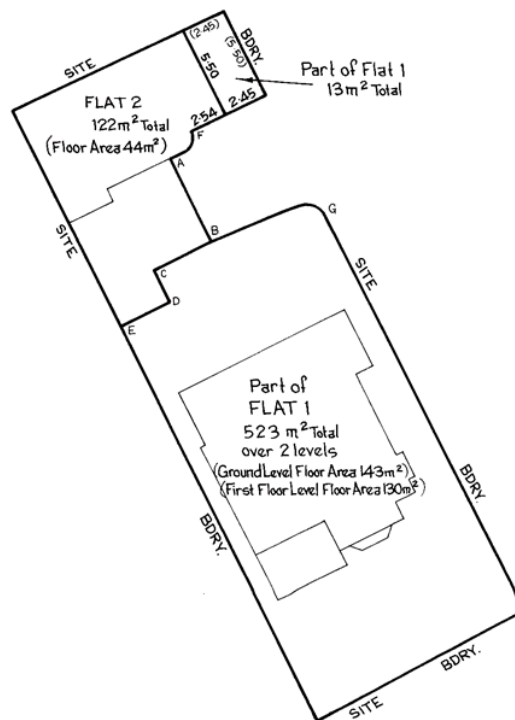
M. A. A. A.

No. 437

ACT 17/15 Town Clerk/Council Clerk

All horizontal flat boundaries are shown by heavy unbroken lines and are along :
 - site boundaries
 - outer face of walls marked A-B-C-D-E.
 - centre of walls marked A-F & B-G.
 - open boundaries described by measurements not in brackets.
 Measurements in brackets are for boundary fixation only.
 The flats extend vertically from ground level to a height of ten metres above ground level.

GROUND FLOOR
 SCALE 1:250





**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 59085	FOLIO 1
EDITION 11	DATE OF ISSUE 02-Jul-2018

SEARCH DATE : 20-Dec-2019

SEARCH TIME : 08.53 AM

DESCRIPTION OF LAND

City of HOBART

Lot 1 on Strata Plan 59085 (formerly being STR437) and a
general unit entitlement operating for all purposes of the
Strata Scheme being a 750 undivided 1/1000 interest

Derived from Strata Plan 59085

Derivation : Part of 89A-2R-0Ps. Gtd. to W. M. Orr

Prior CT 3538/88

SCHEDULE 1

M511440 TRANSFER to ROSS CHARLES HARRIS and LUCY CHANTAL
HARRIS Registered 17-Apr-2015 at noon

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
The registered proprietor holds the lot and unit entitlement
subject to any interest noted on common property
Folio of the Register volume 59085 folio 0

BENEFITING EASEMENT: full and free right and liberty for
Charles Edward Innes his heirs executors
administrators and assigns his and their tenants
servants and visitors at all times thereafter by day
or by night for all purposes with or without horses
carts carriages waggons or other vehicles of any
description laden or unladen for all purposes
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E140967 MORTGAGE to MyState Bank Limited Registered
02-Jul-2018 at 12.01 PM



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 59085	FOLIO 2
EDITION 15	DATE OF ISSUE 02-Jul-2018

SEARCH DATE : 20-Dec-2019

SEARCH TIME : 08.57 AM

DESCRIPTION OF LAND

City of HOBART

Lot 2 on Strata Plan 59085 (formerly being STR437) and a
general unit entitlement operating for all purposes of the
Strata Scheme being a 250 undivided 1/1000 interest

Derived from Strata Plan 59085

Derivation : Part of 89A-2R-0Ps. Gtd. to W. M. Orr
Prior CT 3538/89

SCHEDULE 1

M681195 TRANSFER to ROSS CHARLES HARRIS and LUCY CHANTAL
HARRIS Registered 14-Mar-2018 at 12.01 PM

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02-Jul-2018 at 12.01 PM



RESULT OF SEARCH

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Issued Pursuant to the Land Titles Act 1980



UNREGISTERED DEALINGS AND NOTATIONS

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RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME	FOLIO
59085	2
EDITION	DATE OF ISSUE
15	02-Jul-2018

SEARCH DATE : 19-Jul-2021
SEARCH TIME : 08:57 AM

DESCRIPTION OF LAND

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E140967 MORTGAGE to MyState Bank Limited Registered
02-Jul-2018 at 12.01 PM



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



UNREGISTERED DEALINGS AND NOTATIONS

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RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 59085	FOLIO 1
EDITION 11	DATE OF ISSUE 02-Jul-2018

SEARCH DATE : 19-Jul-2021
SEARCH TIME : 08:53 AM

DESCRIPTION OF LAND

City of HOBART
Lot 1 on Strata Plan 59085 (formerly being STR437) and a
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HARRIS Registered 17-Apr-2015 at noon

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marked A.B.E.F. on Diagram No. 7894.
E140967 MORTGAGE to MyState Bank Limited Registered
02-Jul-2018 at 12.01 PM



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 59085	FOLIO 0
EDITION 3	DATE OF ISSUE 07-Apr-1999

SEARCH DATE : 19-Jul-2021

SEARCH TIME : 08:53 AM

DESCRIPTION OF LAND

City of HOBART

The Common Property for Strata Scheme 59085 (formerly being STR437)

Derivation : Part of 89A-2R-0Ps. Gtd. to W. M. Orr
Prior CT 3529/26SCHEDULE 1

STRATA CORPORATION NO. 59085, 14 LORD STREET, HOBART

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

BENEFITING EASEMENT: full and free right and liberty for Charles Edward Innes his heirs executors administrators and assigns his and their tenants servants and visitors at all times thereafter by day or by night for all purposes with or without horses carts carriages waggons or other vehicles of any description laden or unladen for all purposes connected with the use and enjoyment of the said land within described to go pass and repass and to drive cattle sheep and other animals along over and upon the strip of land marked B.C.D.E. on Diagram No. 7894.

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B398482 APPLICATION TO AMEND STRATUM PLAN. Registered 18-Dec-1990 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

the **List****FOLIO PLAN**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Conveyancing and Law of Property Act 1884

STRATUM PLAN

REGISTERED NUMBER

No. 437

Sheet 1 of 3 Sheets

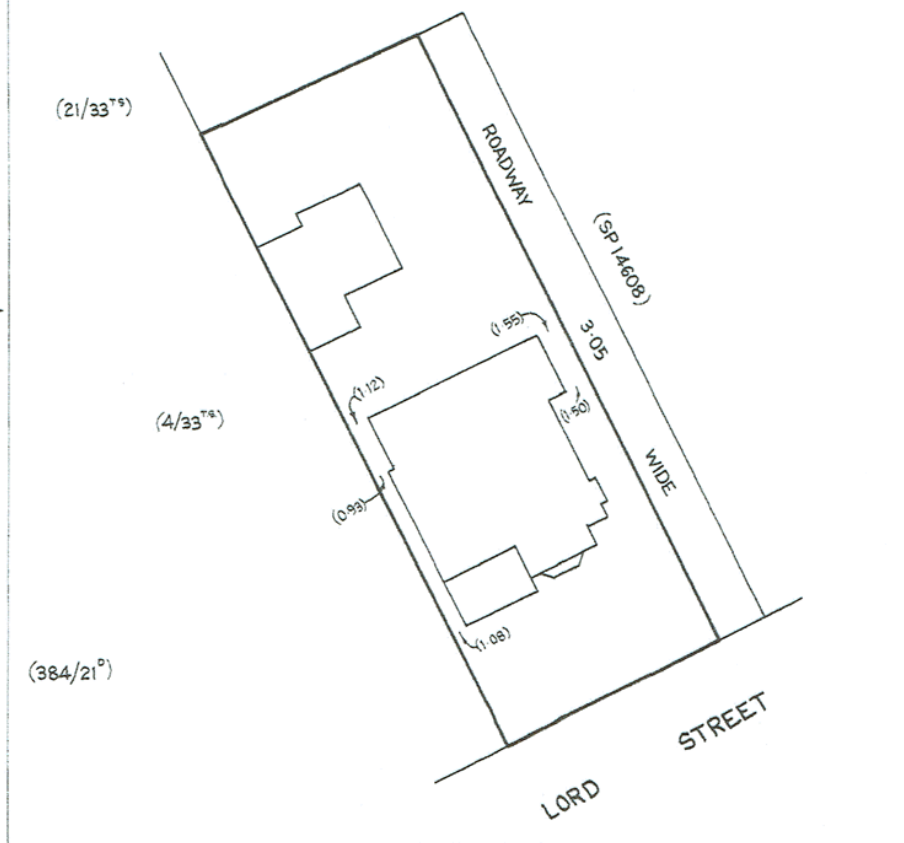
NEW SHEET 1City of Town **HOBART****59085**Locality **Sandy Bay**Reference to Title **C.T.3529-26**Site comprises the whole
portion of Lot 1 on Plan
Diagram No. D7894 in the

Lands Titles Office

The name of the building is **N° 14 Lord Street - Hobart**

External
surface
boundaries of
the site and
the location of
the building
in relation
thereto to
be delineated
in this space

N SITE PLAN
↑ SCALE 1: 250
MEASUREMENTS IN METRES



REGISTERED this day of 19, No. 437

This plan is lodged for registration by
PAGE SEAGER

Recorder of Titles

Sheet 2 of 3 Sheets

NEW SHEET 2

Brendanina

No. 437

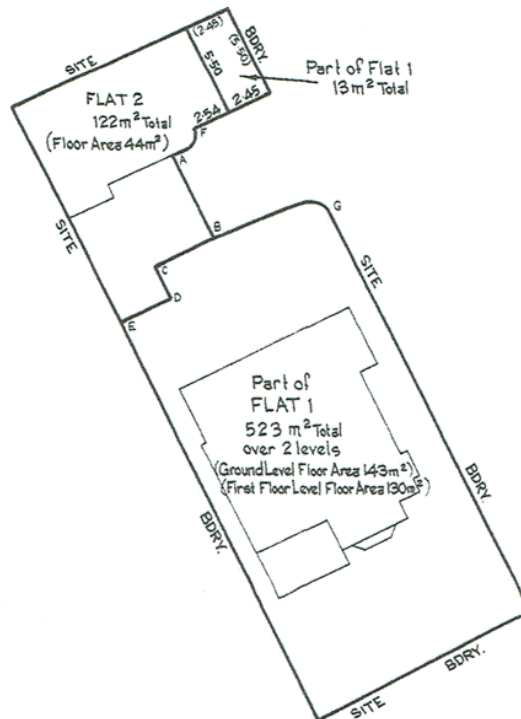
Acting Town Clerk/Council Clerk

All horizontal flat boundaries are shown by heavy unbroken lines and are along :

- site boundaries
- outer face of walls marked A-B-C-D-E.
- centre of walls marked A-F & B-G.
- open boundaries described by measurements not in brackets.

Measurements in brackets are for boundary fixation only.
The flats extend vertically from ground level to a height of ten metres above ground level.

~~GROUND FLOOR~~
SCALE 1:250





FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Sheet 3 of 3 Sheets

NEW SHEET 3

No. 437.

The address for service of notices on the company is:—

N°14 Lord Street
Sandy Bay 7005

UNIT ENTITLEMENTS

Flat	Unit Entitlement	For Office Use Only
1	750	
2	250	
TOTAL	1000	

SURVEYOR'S CERTIFICATE

I, Anthony Cripps Peacock
of Hobart
a surveyor registered under the *Land Surveyor's Act* 1909, hereby certify that the building erected on the site described and delineated on sheet 1 of this plan is within the external boundaries of the title stated on sheet 1.

Dated this 22nd day of October 1990

Surveyors Ref: ~~P-240D~~ Registered Surveyor

COUNCIL CLERK'S CERTIFICATE

I certify that the subdivision shown in this plan
has been approved by the _____

HOBART CITY Council

Dated this 26th day of November 1990

Acting Town Clerk/Council Clerk

FOR OFFICE USE ONLY

"APPLICATION B398482 amending the within plan by substituting Sheet 1, Sheet 2 and Sheet 3 and by cancelling Sheet 4."

M. H. P.

18/12/1990.
Recorder of Titles.



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 59085	FOLIO 2
EDITION 15	DATE OF ISSUE 02-Jul-2018

SEARCH DATE : 19-Jul-2021
SEARCH TIME : 08:57 AM

DESCRIPTION OF LAND

City of HOBART
Lot 2 on Strata Plan 59085 (formerly being STR437) and a
general unit entitlement operating for all purposes of the
Strata Scheme being a 250 undivided 1/1000 interest
Derived from Strata Plan 59085
Derivation : Part of 89A-2R-0Ps. Gtd. to W. M. Orr
Prior CT 3538/89

SCHEDULE 1

M681195 TRANSFER to ROSS CHARLES HARRIS and LUCY CHANTAL
HARRIS Registered 14-Mar-2018 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
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E140967 MORTGAGE to MyState Bank Limited Registered
02-Jul-2018 at 12.01 PM



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



JNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 59085	FOLIO 1
EDITION 11	DATE OF ISSUE 02-Jul-2018

SEARCH DATE : 19-Jul-2021

SEARCH TIME : 08:53 AM

DESCRIPTION OF LAND

City of HOBART

Lot 1 on Strata Plan 59085 (formerly being STR437) and a general unit entitlement operating for all purposes of the Strata Scheme being a 750 undivided 1/1000 interest

Derived from Strata Plan 59085

Derivation : Part of 89A-2R-0Ps. Gtd. to W. M. Orr

Prior CT 3538/88

SCHEDULE 1

M511440 TRANSFER to ROSS CHARLES HARRIS and LUCY CHANTAL
HARRIS Registered 17-Apr-2015 at noon

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unladen in over along and upon the strip of land
marked A.B.E.F. on Diagram No. 7894.
E140967 MORTGAGE to MyState Bank Limited Registered
02-Jul-2018 at 12.01 PM



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 59085	FOLIO 0
EDITION 3	DATE OF ISSUE 07-Apr-1999

SEARCH DATE : 19-Jul-2021

SEARCH TIME : 08:53 AM

DESCRIPTION OF LAND

City of HOBART

The Common Property for Strata Scheme 59085 (formerly being STR437)

Derivation : Part of 89A-2R-0Ps. Gtd. to W. M. Orr
Prior CT 3529/26SCHEDULE 1

STRATA CORPORATION NO. 59085, 14 LORD STREET, HOBART

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
 BENEFITING EASEMENT: full and free right and liberty for
 Charles Edward Innes his heirs executors
 administrators and assigns his and their tenants
 servants and visitors at all times thereafter by day
 or by night for all purposes with or without horses
 carts carriages waggons or other vehicles of any
 description laden or unladen for all purposes
 connected with the use and enjoyment of the said land
 within described to go pass and repass and to drive
 cattle sheep and other animals along over and upon
 the strip of land marked B.C.D.E. on Diagram No. 7894.

BENEFITING EASEMENT: a right of way for Florence Mabel West
 her heirs executors administrators and assigns with
 or without horses carts carriages or waggons laden or
 unladen in over along and upon the strip of land
 marked A.B.E.F. on Diagram No. 7894.

B398482 APPLICATION TO AMEND STRATUM PLAN. Registered
 18-Dec-1990 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Conveyancing and Law of Property Act 1884

STRATUM PLAN

REGISTERED NUMBER

No. 437

Sheet 1 of 3 Sheets

NEW SHEET 1City of Town HOBART**59085**Locality Sandy BayReference to Title C.T.3529-26Site comprises the whole
portion of Lot 1on Plan
Diagram No. D7894

in the

Lands Titles Office

The name of the building is N°14 Lord Street - Hobart

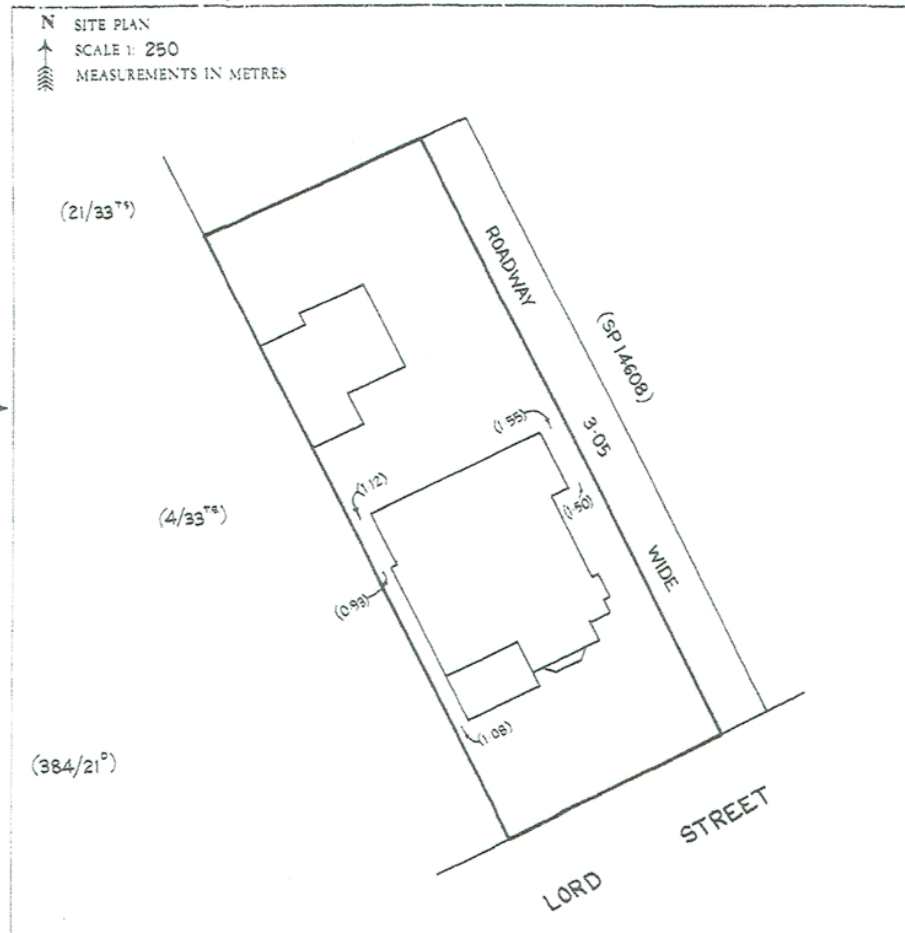
External
surface
boundaries of
the site and
the location of
the building
in relation
thereto to
be delineated
in this space



N SITE PLAN

SCALE 1: 250

MEASUREMENTS IN METRES

REGISTERED this day of 19....., No. 437This plan is lodged for registration by
PAGE SEAGER

Recorder of Titles

the List

FOLIO PLAN
RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Sheet 2 of 3 Sheets

NEW SHEET 2

P. M. M. M. M. M.

No. 437

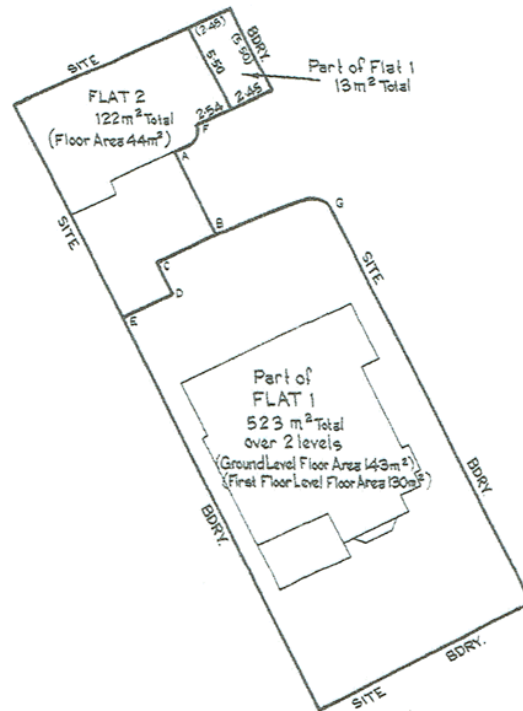
ACT 17-15 Town Clerk/Council-Clerk

All horizontal flat boundaries are shown by heavy unbroken lines and are along:

- site boundaries
- outer face of walls marked A-B-C-D-E.
- centre of walls marked A-F & B-G.
- open boundaries described by measurements not in brackets.

Measurements in brackets are for boundary fixation only.
The flats extend vertically from ground level to a height of ten metres above ground level.

~~GROUND FLOOR~~
SCALE 1:250





FOLIO PLAN
RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Sheet 3 of 3 Sheets

NEW SHEET 3

No. 437.

The address for service of notices on the company is:—

N°14 Lord Street
Sandy Bay 7005

UNIT ENTITLEMENTS

Flat	Unit Entitlement	For Office Use Only
1	750	
2	250	
TOTAL	1000	

SURVEYOR'S CERTIFICATE

I, Anthony Cripps Peacock
of Hobart
a surveyor registered under the *Land Surveyor's
Act* 1909, hereby certify that the building
erected on the site described and delineated on
sheet 1 of this plan is within the external bound-
aries of the title stated on sheet 1.

Dated this 22nd day of October 1990

Surveyors Ref: P240D *Registered Surveyor*

COUNCIL CLERK'S CERTIFICATE

I certify that the subdivision shown in this plan
has been approved by the _____

HOBART CITY Council
Dated this 26th day of November 1990

Acting Town Clerk/Council Clerk

FOR OFFICE USE ONLY

"APPLICATION B398482 amending the within plan by substituting Sheet 1, Sheet 2 and Sheet 3 and by cancelling Sheet 4."

St. A. P. R.

18/12/1990.
Recorder of Titles.

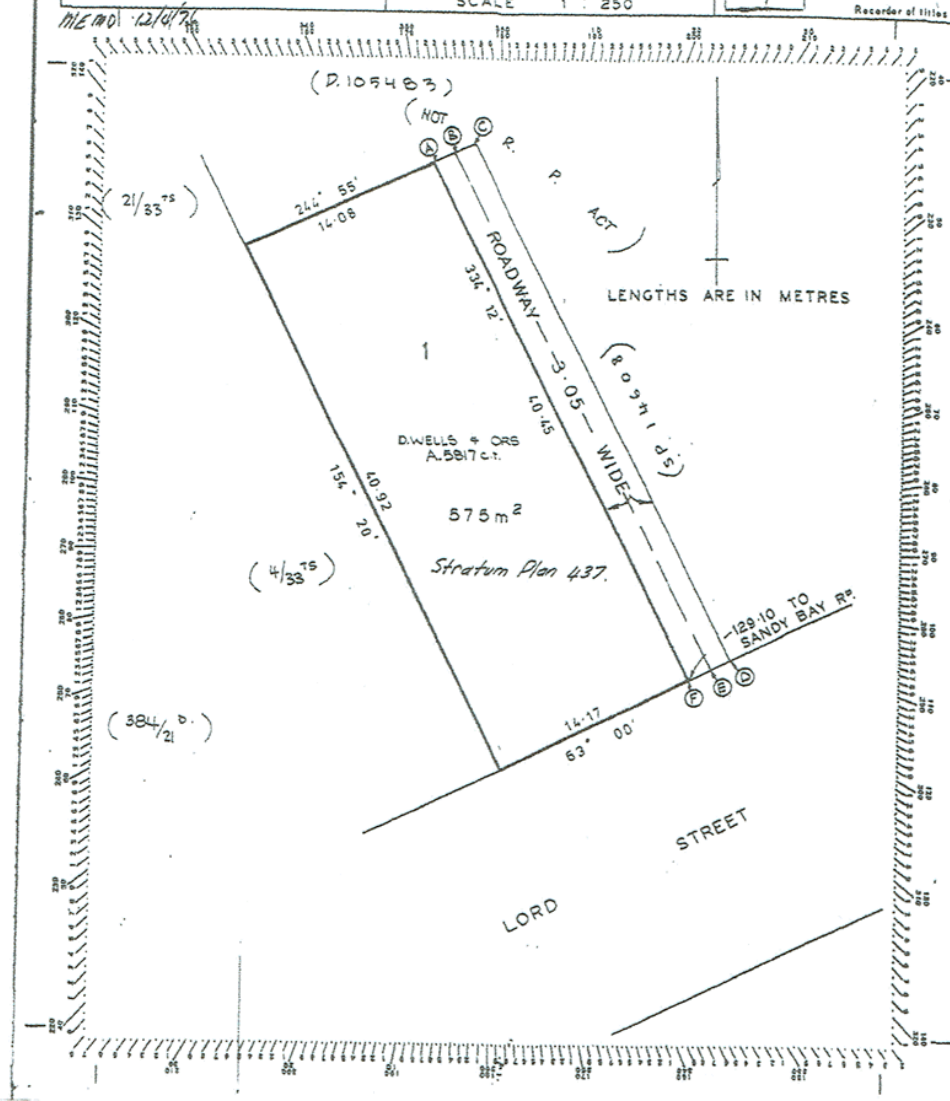
the **List****FOLIO PLAN**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



CT 225-65 7894 16 MAR 1976 A 501707 <i>W. M. Orr</i>		Registered Number: D7894
Owners: W. B. E. ROSE D. Wells & Ors	PLAN OF SURVEY by Surveyor <i>W. M. Orr</i> of land situated in the CITY OF HOBART	APPROVED <i>30-4-76</i> P/I <i>W. M. Orr</i> Recorder of Titles
Title Reference: CONV. 30-4-76 48/5618	SCALE 1 : 250	
Grantee: PART OF 89.2.0 GTD. TO WILLIAM MORGAN ORR		



Search Date: 19 Jul 2021

Search Time: 11:28 AM

Volume Number: 7894

Revision Number: 02

Page 1 of 1

Department of Primary Industries, Parks, Water and Environment

www.thelist.tas.gov.au

the **List****SURVEY NOTES**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



7894

CITY OF HOBART

PART OF 89.2.0 GTD. TO WY MORGAN ORR

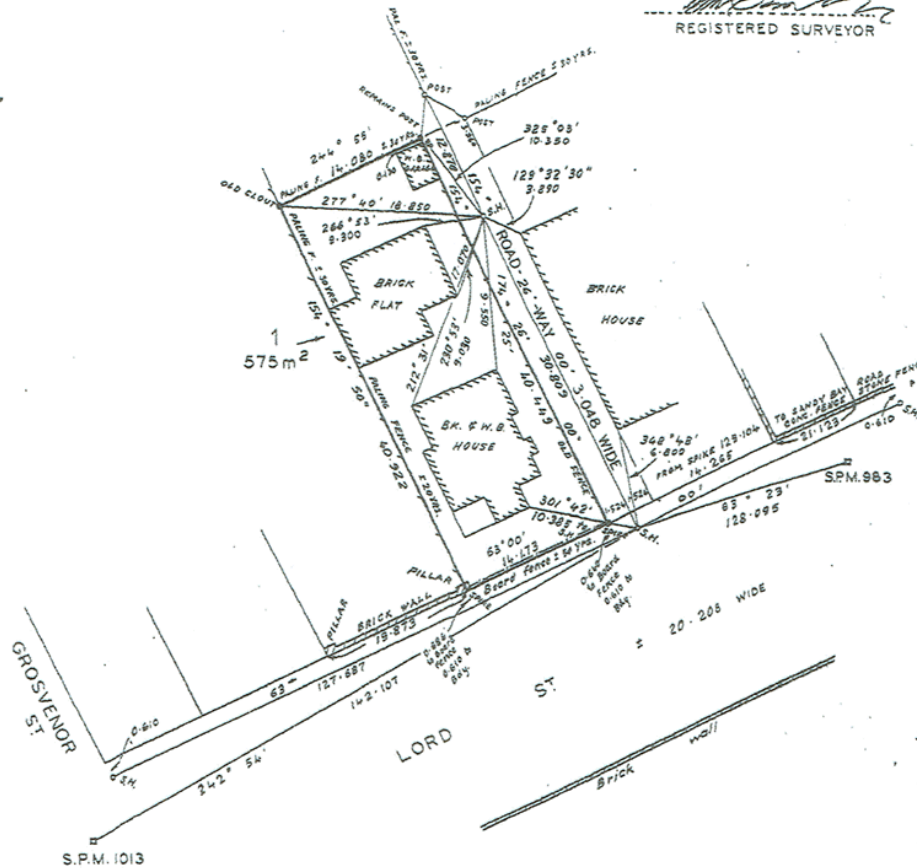
N.B.E. ROFE OW. CONV. 30 - 4014

SURVEY COMMENCED 22.1.20SURVEY FINISHED 29.1.20

LENGTHS ARE IN METRES

THESE SURVEY NOTES ARE
CORRECTLY COMPILED FROM
THE FIELD NOTES OF THIS
SURVEY.

[Signature]
REGISTERED SURVEYOR





SURVEY NOTES

RECORDED OF TITLES

Issued Pursuant to the Land Titles Act 1980



<p>JOHN DAWFORD & ASSOCIATES LAND & ENGINEERING SURVEYORS 1 Aberdeen Street GLEBE 7000 Telephone (03) 8231 3116 Fax. 8251 4321</p>	<p>LAST SURVEY PLAN No. D 7894 (TO BE FILED WITH)</p>
<h2 style="margin: 0;">RE-MARK PLAN</h2>	
<p>LOCATION Ctly of HOBART OWNER B.L Wilkinson & R.L Wilkinson POLID REFERENCE CT 59085/2 GRANTEE Part of 89-2-00 Gtd to William Morgan Orr</p>	
<p>LENGTHS IN METRES</p>	
<p>SURVEYORS REF No. 2047</p>	<p>ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN</p>

SURVEY CERTIFICATE

I, John Wilkinson, of Hobart, Tasmania a registered surveyor HEREBY CERTIFY that:

(a) this survey is based upon the best evidence that the nature of the case admits

(b) the survey notes have been truly compiled from surveys made by me or under my supervision; and

(c) this survey and accompanying survey notes comply with the relevant legislation affecting surveys and are correct for the purpose required.

John Wilkinson Date 2 / 6 / 00
 Signature



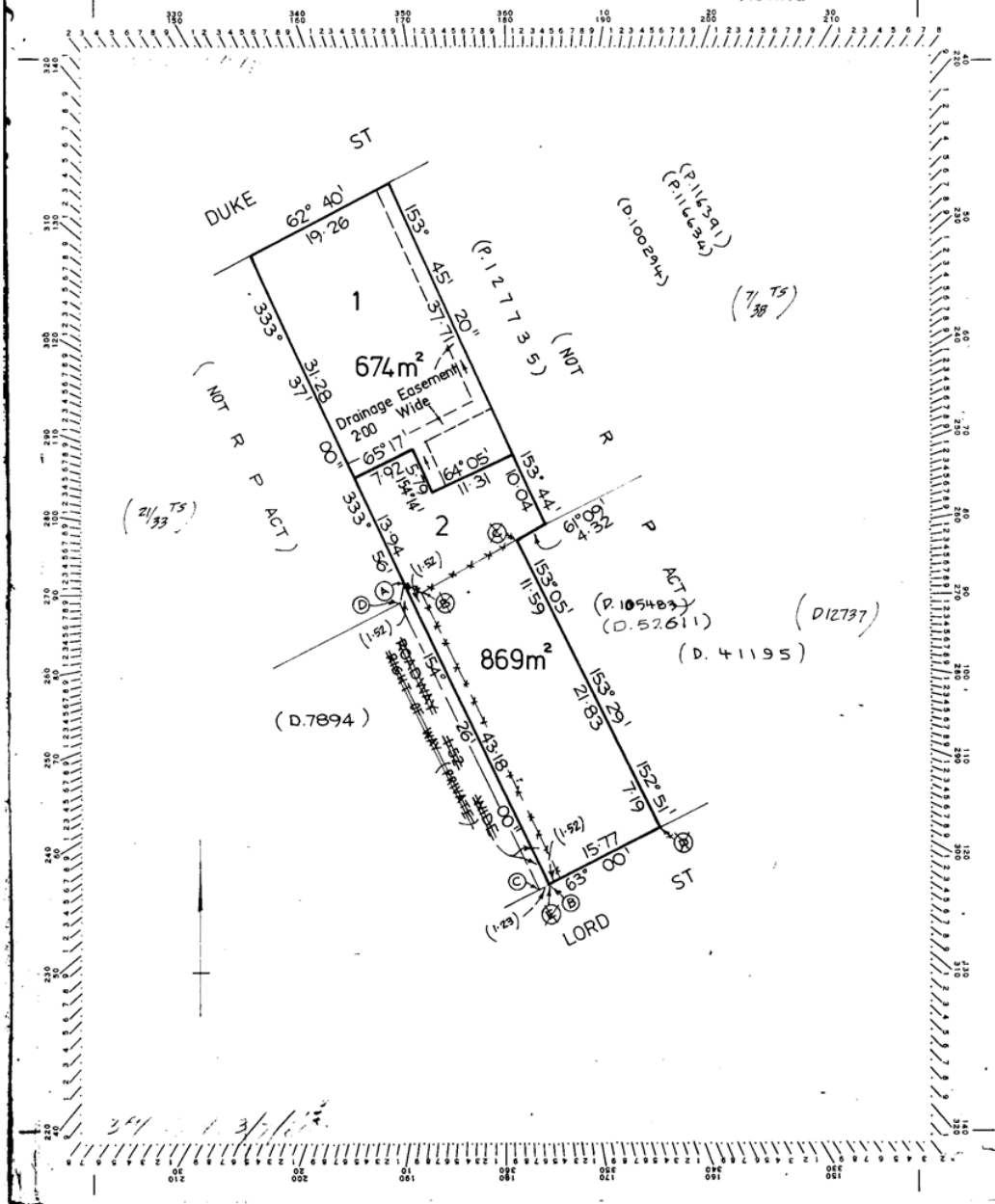
FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Owner: J. S. F. Young	PLAN OF SURVEY by Surveyor D. J. McANDY of land situated in the	Registered Number: S.P14608
Title Reference: Conv 47-3167 Conv 50-1432	CITY OF HOBART	Effective from: 1. JUN 1981
Grantee: Part of 89-2-0 Gld to W. M. Orr.	SCALE: 1:500 Measurements in metres	<i>J. Broad</i> ACTING DEPUTY Recorder of titles



**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME 14608	FOLIO 2
EDITION 1	DATE OF ISSUE 30-Jun-1994

SEARCH DATE : 17-Aug-2021

SEARCH TIME : 12.04 PM

DESCRIPTION OF LAND

City of HOBART
Lot 2 on Sealed Plan 14608
Derivation : Part of 89A-2R-0Ps Gtd to W M Orr
Prior CT 3891/11

SCHEDULE 1

A866642 TRANSFER to WILLIAM JAMES FITZGERALD and WENDY
BERNADINA FITZGERALD

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
SP 14608 EASEMENTS in Schedule of Easements
B179843 MORTGAGE to Australia and New Zealand Savings Bank
Limited Registered 20-Apr-1988 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



SCHEDULE OF EASEMENTS

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SCHEDULE OF EASEMENTS

SEALED
Plan No. 14608

NOTE:—The Town Clerk or Council Clerk must sign the certificate on the back page for the purpose of identification.

The Schedule must be signed by the owners and mortgagees of the land affected. Signatures should be attested.

EASEMENTS: -

Lot 2 is:- Together with a full right and liberty for the Owner hereof his heirs personal representatives and assigns at all times hereafter by day or by night and for all purposes with or without horses carts carriages and waggons laden or unladen to go pass and repass and to drive cattle sheep and other animals along over and upon all that strip of land marked A.B.C.D. hereon.

Lot 2 is:- Together with a right of drainage over the drainage easement shown hereon.

Lot 1 is:- Subject to a right of drainage (appurtenant to Lot 2 hereon) over the drainage easement shown hereon.

SIGNED by JOHN SENIOR FORBES)
YOUNG as the Owner of land)
in Conveyance No. 50/1432)
and the Owner of land in)
Conveyance No. 47/3167)



The Common Seal of the Superannuation Fund Board was hereto affixed by Order at a Meeting of the Board in the presence of

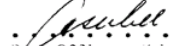
Members
 Secretary

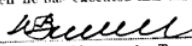
THIS COPY SCHEDULE CONSISTS OF 1 PAGE/S

**SCHEDULE OF EASEMENTS**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Signed sealed and delivered by
William Thomas Brewer
as the Attorney for and as the act and deed of
Bank of New South Wales in the presence of

Bank Officer, Hobart, Tas.

BANK OF NEW SOUTH WALES
by its Attorney
who hereby states that at the time of executing this
instrument he had no notice of the revocation of the
Power of Attorney Registered No. 18948 under the
authority of which he has executed this instrument.

Chief Manager for Tasmania.



SCHEDULE OF EASEMENTS

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



Sealed Plan No 14608

Certified correct for the purposes of the Real Property Act 1862, as amended.

.....
Subdivider/Solicitor for the SubdividerThis is the schedule of easements attached to the plan of JOHN SENIOR FORBES YOUNG
(Insert Subdivider's Full Name)

..... affecting land in

..... Conveyance No. 50/1432 and Conveyance No. 47/3167
(Insert Title Reference)

Sealed by HOBART CITY COUNCIL on 30th. JUNE 1980

3029

.....
City Clerk/Town Clerk

**7.1.2 1/816 SANDY BAY ROAD, SANDY BAY AND COMMON LAND OR
PARENT TITLE - PARTIAL DEMOLITION, ALTERATIONS AND
EXTENSION
PLN-21-454 - FILE REF: F22/4992**

Address: 1/816 Sandy Bay Road, Sandy Bay and
Common Land or Parent Title

Proposal: Partial Demolition, Alterations and Extension

Expiry Date: 22 February 2022

Extension of Time: Not applicable

Author: Deanne Lang

RECOMMENDATION

That pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for partial demotion, alterations and extension at 1/816 Sandy Bay Road Sandy Bay 7005 and Common Land of Parent Title for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-21-454 - 1/816 SANDY BAY ROAD SANDY BAY TAS 7005 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

ENG sw1

All stormwater from the proposed development (including but not limited to: roofed areas, ag drains, retaining wall ag drains and impervious surfaces such as driveways and paved areas) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Advice:

Under section 23 of the Urban Drainage Act 2013 it is an offence for a property owner to direct stormwater onto a neighbouring property.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

ENG 2a

Prior to first occupation or commencement of use (whichever occurs first), vehicular barriers compliant with the Australian Standard AS/NZS 1170.1:2002 must be installed to prevent vehicles running off the edge of an access driveway or parking module (parking spaces, aisles and manoeuvring area) where the drop from the edge of the trafficable area to a lower level is 600mm or greater, and wheel stops (kerb) must be installed for drops between 150mm and 600mm. Barriers must not limit the width of the driveway access or parking and turning areas approved under the permit.

Advice:

The Council does not consider a slope greater than 1 in 4 to constitute a lower level as described in AS/NZS 2890.1:2004 Section 2.4.5.3. Slopes greater than 1 in 4 will require a vehicular barrier or wheel stop.

Designers are advised to consult the [National Construction Code 2016](#) to determine if pedestrian handrails or safety barriers compliant with the NCC2016 are also required in the parking module this area may be considered as a path of access to a building.

Reason for condition

To ensure the safety of users of the access driveway and parking module and compliance with the standard.

ENG 3b

The following aspects of the access driveway and parking module (parking spaces and manoeuvring area) require further detailed

designs:

1. Extent and depth of excavations abutting Council's highway reservation; and
2. Detailed design of any earth retaining structures abutting Council's highway reservation.

This documentation must be submitted and approved as a condition endorsement, prior to the issuing of any approval under the *Building Act 2016*. The detailed designs must:

1. be prepared and certified by a suitably qualified engineer;
1. be in accordance with the design EAST documentation received by the Council on the 1st December 2021;
2. be in accordance with the Australian Standard AS/NZS 2890.1:2004, if possible;
3. where the design deviates from AS/NZS 2890.1:2004 the designer must demonstrate that the design will provide a safe and efficient access, and enable safe, easy and efficient use; and
4. show dimensions, levels, gradients and transitions, and other details as Council deem necessary to satisfy the above requirement; and
5. show cross-sections at 2 metre intervals along the length of the driveway abutting the Sandy Bay highway reservation showing the extent of excavations, earth retaining structures, cross fall gradients, existing natural surface level (NSL) and new design levels from the back of footpath for the width of the proposed driveway (including any batter slopes).

The access driveway and parking area must be constructed in accordance with the approved detailed designs prior to first occupation.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

It is advised that designers consider the detailed design of the access and parking module prior to finalising the Finished Floor

Level (FFL) of the parking spaces (especially if located within a garage incorporated into the dwelling), as failure to do so may result in difficulty complying with this condition.

Reason for condition

To ensure the safety of users of the access and parking module, and compliance with the relevant Australian Standard.

ENG 3c

The access driveway and parking module (parking spaces, aisle and manoeuvring area) must be constructed in accordance with the design drawings approved by Condition ENG 3b.

Prior to the commencement of use, documentation by a suitably qualified engineer certifying that the access driveway and parking module has been constructed in accordance with the above drawings must be lodged with Council.

Advice:

Certification may be submitted to Council as part of the Building Act 2016 approval process or via condition endorsement (see general advice on how to obtain condition endorsement)

Reason for condition

To ensure the safety of users of the access and parking module, and compliance with the relevant Australian Standard.

ENG 4

The access driveway and parking module (car parking spaces, aisles and manoeuvring area) approved by this permit must be constructed to a sealed standard (spray seal, asphalt, concrete, pavers or equivalent Council approved) and surface drained to the Council's stormwater infrastructure prior to the commencement of use.

Reason for condition

To ensure the safety of users of the access driveway and parking module, and that it does not detract from the amenity of users, adjoining occupiers or the environment by preventing dust, mud and sediment transport.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or
2. Be repaired and reinstated by the owner to the satisfaction of the Council.

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENG r1

The excavation and earth-retaining structures (i.e. cuttings, retaining walls) and/or footings supporting the highway reservation must not undermine the stability and integrity of the highway reservation and its infrastructure.

Detailed design drawings, structural certificates and associated geotechnical assessments of the excavation and earth-retaining structures supporting the Sandy Bay Road highway reservation must be submitted and approved as a Condition Endorsement, prior to the commencement of work and must:

1. Be prepared and certified by a suitable qualified person and experienced engineer;
2. Not undermine the stability of the highway reservation;

3. Be designed in accordance with AS 4678, with a design life in accordance with table 3.1 typical application major public infrastructure works;
4. Take into account any additional surcharge loadings as required by relevant Australian Standards;
5. Take into account and reference accordingly any Geotechnical findings;
6. Detail any mitigation measures required; and
7. Detail the design and location of the footing adjacent to Sandy Bay Road highway reservation.

The structure certificated and/or drawings should note accordingly the above. All work required by this condition must be undertaken in accordance with the approved select design drawing and structural certificates.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that the stability and integrity of the Council's highway reservation is not compromised by the development.

ENV 1

Sediment and erosion control measures sufficient to prevent sediment from leaving the site must be installed prior to any disturbance of the site, and maintained until all areas of disturbance have been stabilized or re-vegetated.

Advice:

For further guidance in preparing a Soil and Water Management Plan – in accordance with Fact sheet 3 Derwent Estuary Program click [here](#).

Reason for condition

To avoid the sedimentation of roads, drains, natural watercourses, Council land that could be caused by erosion and runoff from the development, and to comply with relevant State legislation.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

OCCUPATION OF THE PUBLIC HIGHWAY

You may require a permit for the occupation of the public highway for construction (e.g. placement of skip bin, crane, scissor lift etc). Click [here](#) for more information.

DRIVEWAY SURFACING OVER HIGHWAY RESERVATION

If a coloured or textured surface is used for the driveway access within the Highway Reservation, the Council or other service provider will not match this on any reinstatement of the driveway access within the Highway Reservation required in the future.

STRATA AMENDMENT



You will be required to amend the strata plan pursuant to the provisions of the *Strata Titles Act 1998* in order to reflect the completed development works. Click [here](#) for more information.

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.

- | | |
|---------------|---|
| Attachment A: | PLN-21-454 - 1/816 SANDY BAY ROAD SANDY BAY TAS 7005 - Planning Committee or Delegated Report ↓  |
| Attachment B: | PLN-21-454 - 1 816 SANDY BAY ROAD SANDY BAY TAS 7005 - CPC Agenda Documents ↓  |

**APPLICATION UNDER HOBART INTERIM PLANNING SCHEME 2015**

Type of Report:	Committee
Committee:	24 January 2022
Expiry Date:	22 February 2022
Application No:	PLN-21-454
Address:	1 / 816 SANDY BAY ROAD , SANDY BAY COMMON LAND OF PARENT TITLE
Applicant:	DESIGN EAST PTY LTD 153 DAVEY STREET
Proposal:	Partial Demolition, Alterations, and Extension
Representations:	Five (5)
Performance criteria:	12.0 Low Density Residential Zone - Development Standards for Building and Works- Site Coverage, Impervious Surfaces and Private Open Space for Multiple Dwellings E3.0 Landslide Code, E6.0 Parking and Access Code

1. Executive Summary

- 1.1 Planning approval is sought for Partial Demolition, Alterations and Extension at 1/816 Sandy Bay Road, Sandy Bay and Common Land of Parent Title.
- 1.2 More specifically the proposal includes:
 - demolition of the existing stairs and deck at upper and ground floor levels;
 - the existing carport will be converted to a bedroom and ensuite and further excavation at ground floor level will create a new ground floor level access;
 - the existing 7.5sqm first floor deck on the eastern (rear) elevation will be demolished and a new 34sqm deck will be constructed. This deck will have the same (2.790m) side setback as the existing deck;
 - a double garage will be a constructed beneath the new deck;
 - a 1.7m high privacy screen will be erected for the full length of the southern elevation of the deck;
 - widening of the existing driveway to allow for a passing bay to be provided; and
 - installation of 900mm high bollards at 1m intervals along the first 14 m of the southern side of the driveway

- 1.3 The proposal relies on performance criteria to satisfy the following standards and codes:
 - 1.3.1 Low Density Residential Zone - Site Coverage, Area free from Impervious Surfaces, Private Open Space for Multiple Dwellings
 - 1.3.2 E3.0 Landslide Code - Building and Works, Other than Minor Extensions
 - 1.3.3 E6.0 Parking and Access Code -Design of Vehicular Accesses, Vehicular Passing Areas Along an Access
- 1.4 Five (5) representations objecting to the proposal were received within the statutory advertising period between 7-21 December 2021.
- 1.5 The proposal is recommended for approval subject to conditions.
- 1.6 The final decision is delegated to the City Planning Committee, because five representations were received within the statutory advertising period.

2. Site Detail

- 2.1 The subject site is located on the eastern side of Sandy Bay Road and is part of a two lot strata scheme, each containing one dwelling. The site is opposite Council's Pearce's Reserve, which in addition to being a Council owned reserve, contains 2 buildings, both of which are used as office accommodation. The adjoining property to the north (814 Sandy Bay Road) consists of vacant residential land, while the remaining properties in the immediate area are a mix of single and multiple dwellings.



Fig. 1 - the subject site is bordered in blue



Fig. 2 - the site and dwelling which are the subject of this proposal

3. Proposal

- 3.1 Planning approval is sought for Partial Demotion, Alterations and Extension at 1/816 Sandy Bay Road Sandy Bay and Common Land of Parent Title.
- 3.2 More specifically the proposal is for:
- demolition of the existing stairs and deck at upper and ground floor levels;
 - the existing carport will be converted to a bedroom and ensuite and further excavation at ground floor level will create a new ground floor level access;
 - the existing 7.5sqm first floor deck on the eastern (rear) elevation will be demolished and a new 34sqm deck will be constructed. This deck will have the same (2.790m) side setback as the existing deck;
 - a double garage will be constructed beneath the new deck;
 - a 1.7m high privacy screen will be erected for the full length of the southern elevation of the deck;
 - widening of the existing driveway to allow for a passing bay to be provided; and
 - installation of 900mm high bollards at 1m intervals along the first 14 m of the southern side of the driveway

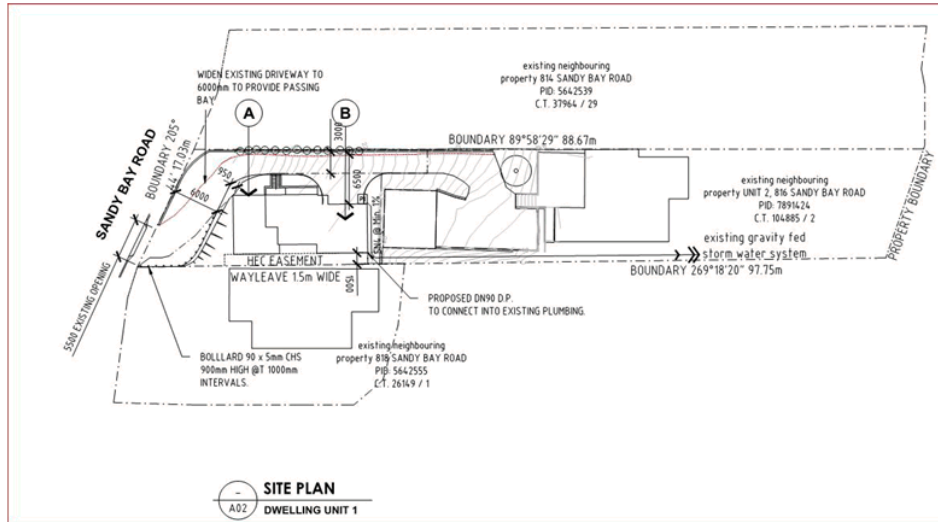


Fig. 3 - Proposed Site Plan showing the proposed works to driveway and location of the dwelling extension

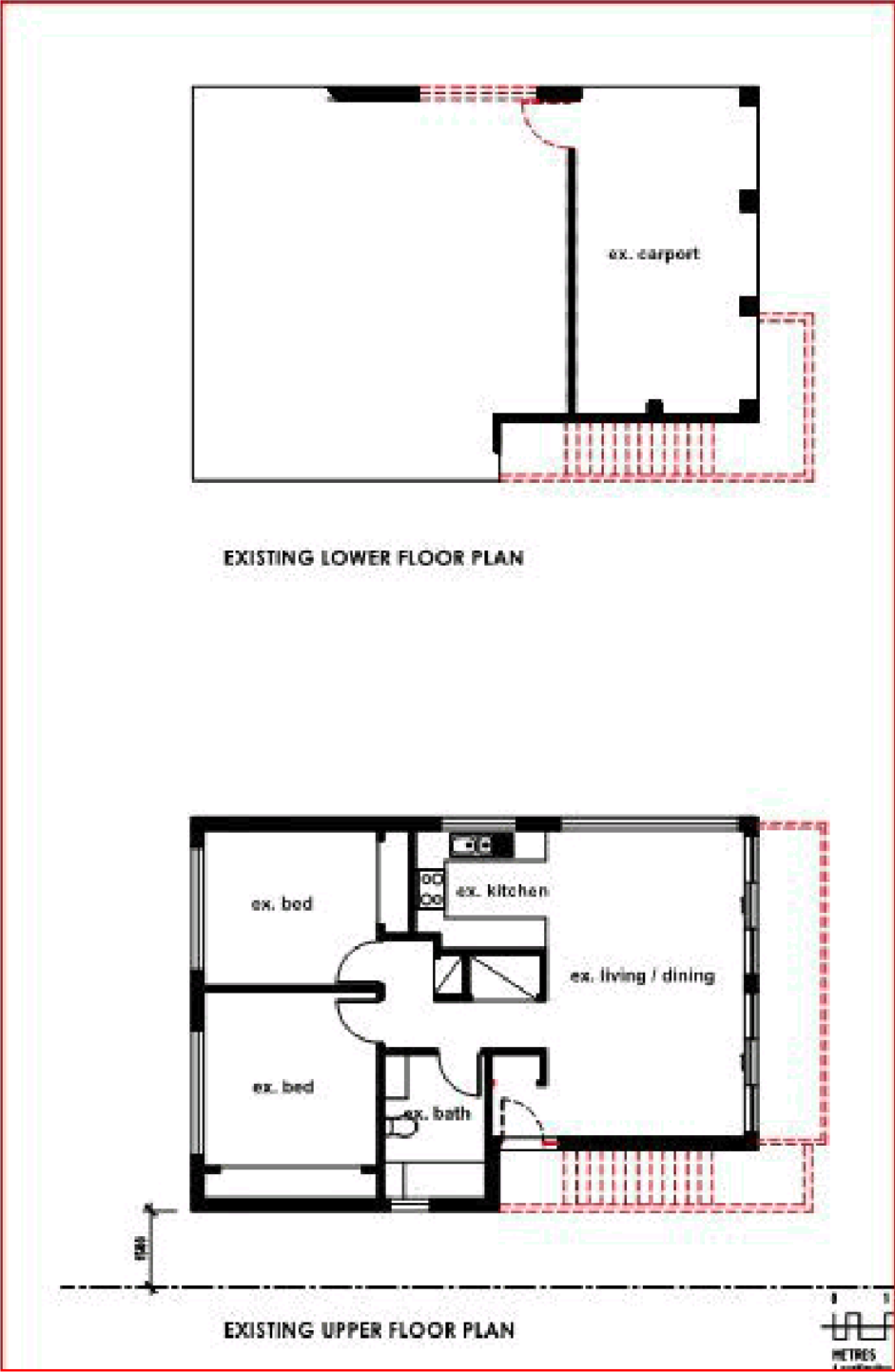


Fig. 4 - Existing floor plans

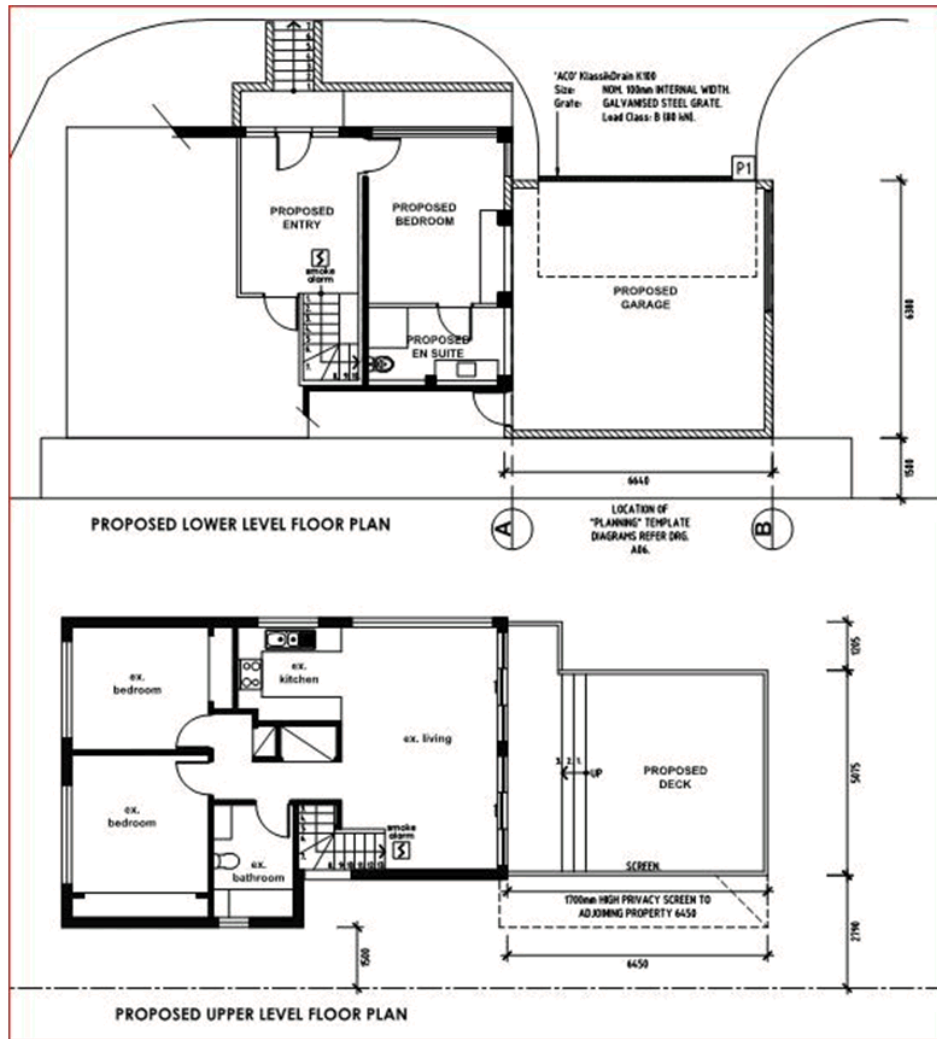


Fig. 5 - Proposed Floor plans



Fig. 6 existing driveway - note: the existing tree stumps will be replaced with bollards



Fig. 7- existing driveway and northern elevation

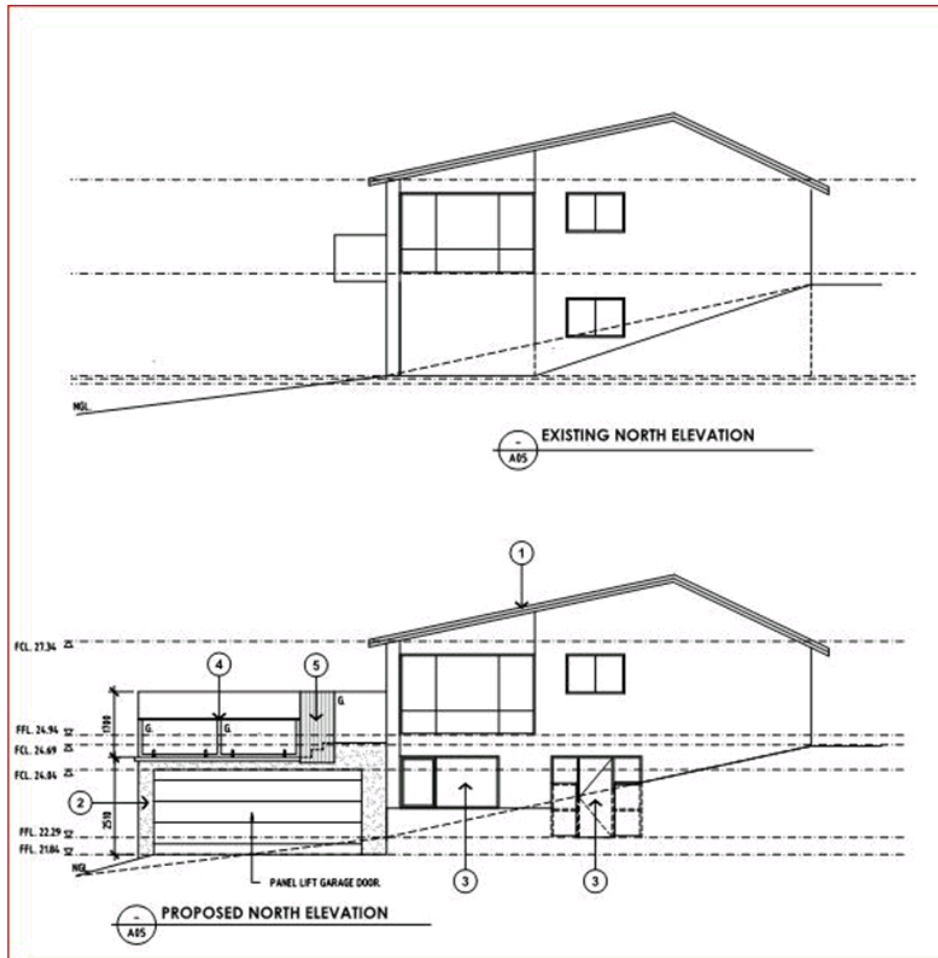


Fig. 8- Existing and proposed northern elevation



Fig. 9 The existing deck will be demolished and a new 34sqm deck will be constructed with the same setback from side boundaries. A double garage will be constructed directly under the deck.

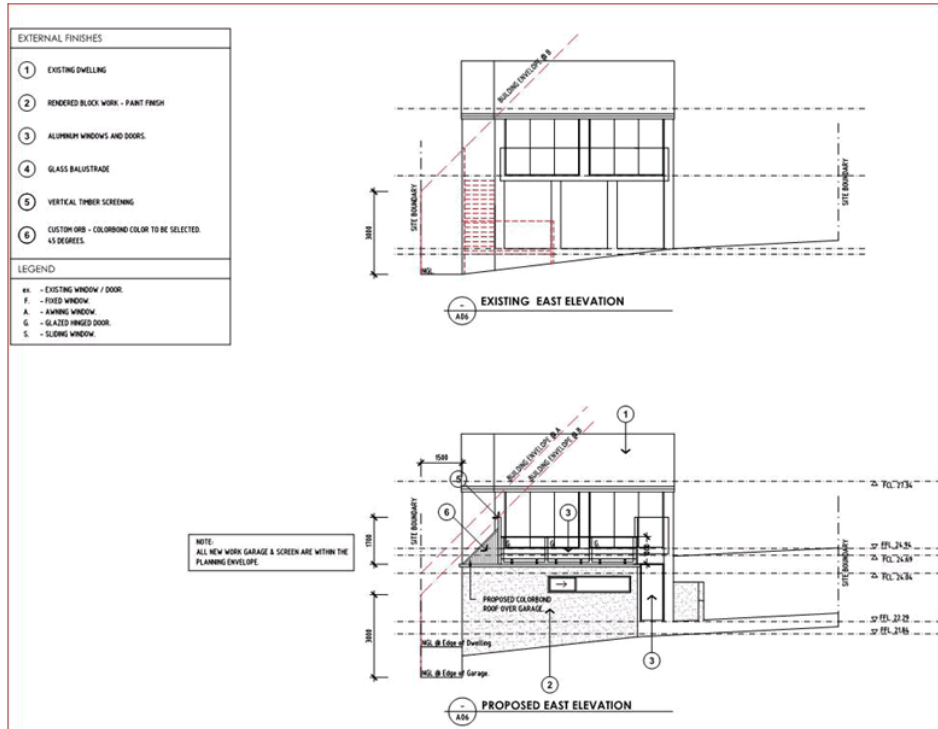


Fig. 10- Existing and Proposed East Elevation

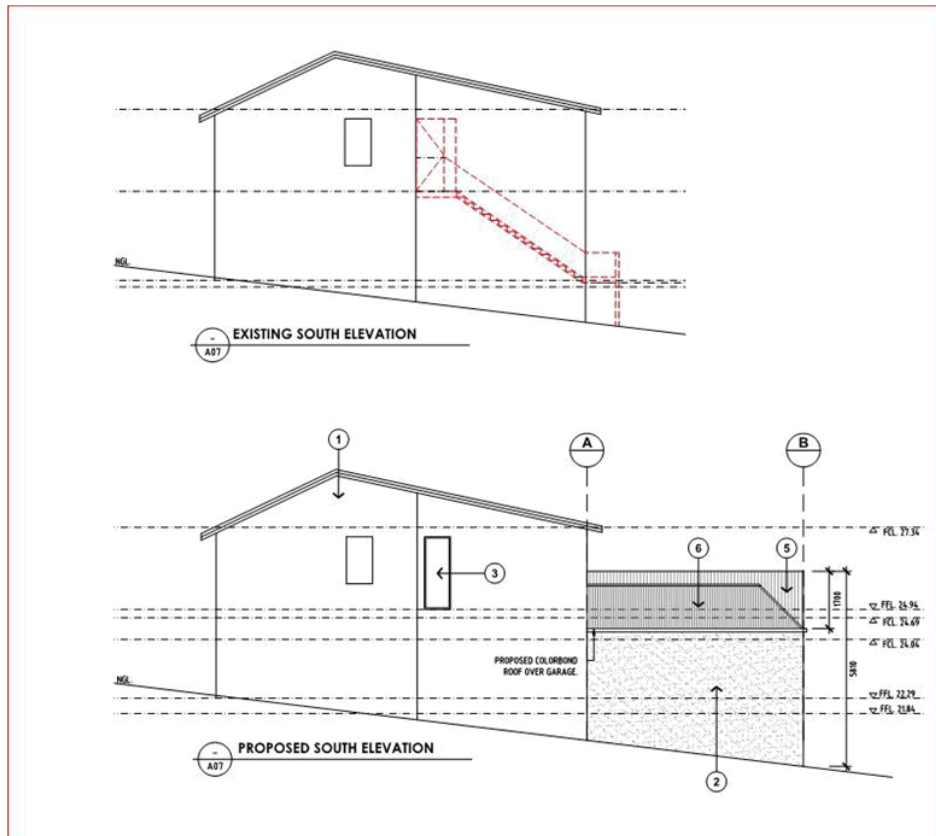


Fig. 11- Existing and Proposed South Elevation

4. Background

- 4.1 An application (PLN-21-203) for a partial change of use to visitor accommodation at 1/816 Sandy Bay Road was approved under delegation on the 7 May 2021. A (CEP) condition was imposed on the permit requiring the applicant to submit a Visitor Management Plan prior to the commencement of the use. Council's records confirm (as at 17 January 2022) that this plan has not been submitted to Council.

A number of representations have confirmed that the visitor accommodation use has commenced and also forwarded a copy of the Management Plan provided to them by the owner of the site. This issue has been referred to our enforcement team for consideration.

- 4.2 The application for alterations and extension to the existing dwelling has been assessed against the provisions relating to multiple dwellings within the *Hobart Interim Planning Scheme 2015*, including those which specifically relate to multiple dwellings, which are as follows:
- Part D 12.4.3A1 (c)- private open space for multiple dwellings;
Part D 12.4.3A2 - dimensions required for private open space;
Part D 12.4.4 A1 - A3- sunlight to habitable rooms and overshadowing, including for multiple dwellings;
Part D 12.4.6 A1 - A3- all privacy provisions (from decks, habitable rooms and shared driveways);
Part D 12.4.8 - waste storage for multiple dwellings; and
Part D 12.4.9 - residential density for multiple dwellings
- 4.3 The applicant submitted a pre-application enquiry (PAE-21-164) for the proposed works. Council's officer confirmed that all proposed internal alterations required to create the ground floor bedroom, ensuite, internal staircase and entry are exempt from obtaining planning permit.
- 4.4 It is noted that the strata lot is located a minimum setback of 50m from the escarpment line and as such no assessment is required against Part D:12.4.10A1 of the *Hobart Interim Planning Scheme 2015*.
- 4.5 The property is part of a two lot strata scheme. The existing house at 2/816 Sandy Bay Road, which is accessed via the driveway which is proposed to be upgraded, is subject to an application (PLN-21-569) for a change of use to visitor accommodation which is currently being assessed by Council.

5. Concerns raised by representors

- 5.1 Five (5) representations objecting to the proposal were received within the statutory advertising period between 7-21 December 2021.
- 5.2 The following table outlines the concerns raised in the representations received. Those concerns which relate to a discretion invoked by the proposal are addressed in Section 6 of this report.

Driveway and Access to the site and general parking concerns

Increased traffic on a dangerous corner for entry/exit of the driveway.

Increased parking requirements using the areas opposite the existing driveway, resulting in tenants crossing Sandy Bay Road on a blind corner. We have witnessed near misses on a regular basis.

The scaling of the vehicles in diagrams indicate smaller vehicles than what is observed in the current driveway. This usually results with the vehicles parking on the street. For unit 2/816 we have observed up to 4 vehicles using the property, essentially one for each bedroom. The same would apply for unit 1/816. Essentially 7 cars shuffling in very limited space. In addition the application requires cars parking at unit 1/816 to use the driveway of unit 2 to enable turning of vehicles.

General Comments on the proposed alterations and extension and resultant use of the site

This is totally unsuitable for further development.

This development will result in creating extra noise with the building with more Airbnb people in this "default motel" established on this overall block.

Unit 1 816 has permits to be operated as a fully commercial two-bedroom Unit, complete with a management plan for two-bedroom accommodation.

This new planning application (for an extension to 1/816 Sandy Bay Road) has three bedrooms, and we request reassessment of the permit for short term accommodation as it allows both properties to be jointly let and large regular parties to be held in a residential neighbourhood setting.

The significant addition of the converted garage and deck area adds yet another level of accommodation to facilitate the "party" environment outlined above. The owner has already advised neighbours that the venue has been subscribed for use as weddings and significant birthday celebrations.

Comments and complaints on the current use of the site (1 and 2/816

Sandy Bay Road)

The owner of the subject site also owns unit 2/ 816 and intends operating both as Airbnb properties.

Unit 2/ 816 Sandy Bay Road is being operated as a fully commercial 4-bedroom accommodation facility. Although it is being advertised as a family retreat with pool and spa facility, what has been observed is essentially an entertainment / party house. Numerous complaints have been lodged with both the police and Airbnb.

The conversion of unit 1/ 816 Sandy Bay Road into short term holiday rental was allowed with the provision of a management plan (see attached) to be circulated to the effected neighbours. This plan has been circulated to the effected neighbours but is not of the required standard.

A noise complaint was made directly to the owner on Friday 4th October by a close owner/occupier/resident and the response from the owner was unreceptive and inappropriate. Typically the owner is either unreceptive or just unresponsive to issues raised regarding management of the properties.

All nearby neighbours (6 in total) have objected already to the raised and regular noise levels.

The owner of unit 2 / 816 verbally committed to installing and developing a range of noise minimisation strategies, including new physical sound barriers, to surrounding neighbours but no infrastructure / physical minimisation structures as promised have been installed.

The owner/residents of 814, 818, U1 818a and U2 818a and 824 have noticed significant increases in light and noise pollution of what is now in essence a commercial accommodation facility (major spotlights on late into the evening / all night lighting pool area and other garden/ car areas).

Overall, all surrounding residents, including residents who are several houses away, feel the recent developments already impinge on the viability of us using our own properties as residential homes and are decreasing our own capacity to alter and enjoy our own properties.

The increased usage due to regular commercial Airbnb utilisation has increased the amount of physical garbage, often left in bags at the top of the driveway as the existing wheelie bins are insufficient for the volume.

All direct neighbours, 814, 818 and 820 Sandy Bay Road have had to remove rubbish in the form of bottles, cans, cigarette butts which have been dropped/thrown over the fence lines.

The residents also feel that the development of 816 Sandy Bay Rd has been one of incremental stages which has enabled commercial development at an unacceptable level for a residential area. Also it is felt that the timing of the application has been planned to minimize opportunity for effective opposition by being lodged prior to Christmas, an old but effective ploy.

Lack of information provided within documentation submitted with the application

There is no shadow diagrams and yet it will clearly overshadow 818, and may overshadow unit 2/818a Sandy Bay Road. The proposed development will reduce significantly the winter and afternoon sun to our property.

There is no retaining walls showed on the plans particularly at the top of the driveway where there will be increased car traffic (and a three metre drop to 818 Sandy Bay Road) and again at the bottom of the proposed development and the boundary to my property. As the land naturally slopes towards my property, any proposed new infrastructure should have properly engineered retaining walls as the existing wooden ones will not suffice

6. Assessment

- 6.1 The *Hobart Interim Planning Scheme 2015* is a performance based planning scheme. To meet an applicable standard, a proposal must demonstrate compliance with either an acceptable solution or a performance criterion. Where a proposal complies with a standard by relying on one or more performance criteria, the Council may approve or refuse the proposal on that basis. The ability to approve or refuse the proposal relates only to the performance criteria relied on.

- 6.2 The site is located within the Low Density Residential Zone of the *Hobart Interim Planning Scheme 2015*.
- 6.3 The existing use is residential (multiple dwelling). The proposed use is residential (multiple dwelling). The existing use is a permitted use in the zone. The proposed use is a permitted use in the zone.
- 6.4 The proposal has been assessed against:
- 6.4.1 Part D - 12 Low Density Residential Zone
 - 6.4.2 E3.0 Landslide Code
 - 6.4.3 E6.0 Parking and Access Code
 - 6.4.4 E7.0 Stormwater Management Code
- 6.5 The proposal relies on the following performance criteria to comply with the applicable standards:
- 6.5.1 Low Density Residential Zone:

Site Coverage, Area free from impervious surfaces and area of private open space for multiple dwellings— Part D 12.4.3P1
 - 6.5.2 E3.0 Landslide Code

Buildings and Works, Other than Minor Extensions, within the Landslide Hazard Area - E3.7.1P1
 - 6.5.3 Parking and Access Code:

Design of Vehicular Accesses - E6.7.2P1
Vehicular Passing Areas Along an Access - E6.7.3P1
- 6.6 Each performance criterion is assessed below.
- 6.7 Maximum Site Coverage, Area free from Impervious Surfaces and Minimum Area of Private Open Space for Multiple Dwellings Part D 12.4.3P1
- 6.7.1 The acceptable solution at clause 12.4.3A1 requires:

- a. a site coverage of no greater than 25%;
- b. a site area of which at least 25% is free from impervious surfaces; and
- c. a total area of no less than 60sqm of private open space per multiple dwelling.

A portion of Lot 2 of the strata scheme is situated east of the Lower Sandy Bay Escarpment Line. This area cannot be and has not been included in the site area for the purpose of calculating the site coverage.

6.7.2 The proposal includes:

- a. a site coverage of 55%;
- b. an area of 15% free from impervious surfaces; and
- c. the dwelling subject to the application is an extension to a multiple dwelling, which will result in an area of 34sqm of open space associated with this dwelling.

6.7.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.7.4 The performance criterion at clause D12.4.3P1 provides as follows:

Dwellings must have:

(a) private open space that is of a size and dimensions that are appropriate for the size of the dwelling and is able to accommodate:

- (i) outdoor recreational space consistent with the projected requirements of the occupants; and*
- (ii) operational needs, such as clothes drying and storage; and*

(b) have reasonable space for the planting of gardens and landscaping.

(c) not be out of character with the pattern of development in the surrounding area; and

(d) not result in an unreasonable loss of natural or landscape values.

6.7.5 The objective of the site coverage and private open space provisions is to provide for outdoor recreation and operational needs of the residents, including that the private open space is integrated within the living areas of the dwelling, which has access to sunlight. The provisions also aim to ensure that there is opportunities for planting of gardens and landscaping

and that the development is compatible with the existing built and natural environment of the area.

The proposal will result in the construction of a 34sqm deck, with access directly via the living/kitchen dining room and results in an extension of the living area which is appropriate for the size of the dwelling. The deck is compatible with the pattern of development in the surrounding area, as the majority of houses have large decks off the living area, which are orientated to the north east to take advantage of the sunlight and views of the River Derwent (see fig. below).

While not expressly shown on the site plan provided, it is considered that there is ample room to continue to provide for the operational needs for any resident. As evident in the photos throughout the report, there is a mature hedge within the property along the northern boundary. This will be retained. There is also opportunity for further landscaping to be undertaken along the southern boundary shared with 818 Sandy Bay Road subsequent to the demolition of the existing external stairs. While there is some existing planting, including an existing conifer between the front boundary and the dwelling, there is reasonable space to upgrade the landscaping in this area.

6.7.6 The proposal complies with the performance criterion.



Fig.12 - the view from the existing (and proposed) deck

6.8 Landslide Code Part E3.7.1P1

- 6.8.1 There is no acceptable solution for building and works, other than minor extension in Landslide Hazard Areas.
- 6.8.2 The proposal includes works to a dwelling which is not considered to be minor works, with the Landslide Hazard Area.
- 6.8.3 There is no acceptable solution; therefore assessment against the performance criterion is relied on.
- 6.8.4 The performance criterion at clause E3.7.1P1 provides as follows:

Buildings and works must satisfy all of the following:

- (a) no part of the buildings and works is in a High Landslide Hazard Area;*
- (b) the landslide risk associated with the buildings and works is either:*
- (i) acceptable risk; or*
- (ii) capable of feasible and effective treatment through hazard management measures, so as to be tolerable risk.*
- 6.8.5 The objective of the provisions relating to building and works (other than minor extensions) under the scheme is to ensure that the building and works within the Landslide Hazard Areas is either an acceptable risk or a tolerable risk, having regard to the feasibility and effectiveness of measures required to manage the landslide hazard.

The proposal was referred to Council's Environmental Development Planner, who undertook an assessment and provided the following report:

Approval is sought for partial demolition, alterations and extensions to an existing dwelling at 1/816 Sandy bay Road, Sandy Bay. Widening of an existing driveway is also proposed.

Landslide Code

The Code applies because development is proposed within a Landslide Hazard Area (Low Landslide Hazard Area). Small portions of the proposed garage/deck would be located within the LHA as well as a small section of driveway widening (including fill).

The land within the LHA has been modelled to be susceptible to debris

flow.



Image1: Landslide Hazard Area relative to the site

The new building works would be exempt from the Code standards pursuant to exemptions clause E3.4(c), however the driveway widening is not exempt.

The relevant standards are under clause E3.7.1. There is no acceptable solution for A1. Performance criterion P1 states the following:

Buildings and works must satisfy all of the following:

- (a) no part of the buildings and works is in a High Landslide Hazard Area;*
- (b) the landslide risk associated with the buildings and works is either:*
 - (i) acceptable risk; or*
 - (ii) capable of feasible and effective treatment through hazard management measures, so as to be tolerable risk.*

No works are proposed in a High LHA in conformity with P1(a).

'Acceptable risk' is defined as 'a risk society is prepared to accept as it is. That is; without management or treatment'.

The modelled landslide susceptibility is to debris flow (run out area) from an up-slope source area, so the works should not increase the likelihood of a debris flow occurring. Given the very small scale of works proposed within the LHA, there would also be no significant change to the consequences if a debris flow did occur.

In addition, Council's in-house debris flow modelling, which is considered to be more sophisticated than the State modelling, does not indicate any debris flow risk in the area.

Based on the above, in my opinion a reasonable person would accept the landslide risk associated with the proposed works without any particular management measures (i.e. acceptable risk) and the exercise of discretion is recommended.

6.8.6 The proposal complies with the performance criterion.

6.9 Part E6.7.2P1 - Design of Vehicular Accesses

6.9.1 The acceptable solution at clause 6.7.2A1 requires vehicle access points to be designed and constructed to comply with the location, sight distance, geometry and gradient under AS2890.2 - 2002.

6.9.2 The proposed 2m x 2.5m sight triangles abutting the driveway are not clear of obstructions to visibility.

6.9.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.9.4 The performance criterion at clause E.6.7.2P1 provides as follows:

Design of vehicle access points must be safe, efficient and convenient, having regard to all of the following:

(a) avoidance of conflicts between users including vehicles, cyclists and pedestrians;

(b) avoidance of unreasonable interference with the flow of traffic on

adjoining roads;

(c) suitability for the type and volume of traffic likely to be generated by the use or development;

(d) ease of accessibility and recognition for users.

- 6.9.5 The standards relating to the design of vehicular accesses is to ensure safe and efficient access for all users, including drivers, passengers, pedestrians and cyclists by locating, designing and constructing vehicle access points safely relative to the road network.

The proposal was referred to Council's Development Engineer who assessed the proposal and concluded that the submitted documents indicated that there were:

- no proposed changes at the road frontage, including fencing;
- no proposed intensification of the existing accesses;
- no proposed intensification and type of users using the existing access; and
- residential use is consistent with the existing use.

On this basis it is considered that the sight lines may be accepted under performance criteria Part E6.7.2P1.

It is also noted that the surrounding properties exhibit similar access provisions.

- 6.9.6 The proposal complies with the performance criterion.

6.10 Part E 6.7.3 Vehicle Passing Areas Along An Access

- 6.10.1 The acceptable solution at clause E6.7.2A1 requires vehicle passing areas to be provided if an access is more than 30m long and meets a road serving more than 6000 vehicles per day.
- 6.10.2 The proposal includes a dwelling extension and works to an access way, which is in excess of 30m long and meets a road serving more than 6000m per day.
- 6.10.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.
- 6.10.4 The performance criterion at clause E6.7.3P1 provides as follows:

Vehicular passing areas must be provided in sufficient number, dimension and siting so that the access is safe, efficient and convenient, having regard to all of the following:

- (a) avoidance of conflicts between users including vehicles, cyclists and pedestrians;*
- (b) avoidance of unreasonable interference with the flow of traffic on adjoining roads;*
- (c) suitability for the type and volume of traffic likely to be generated by the use or development;*
- (d) ease of accessibility and recognition for users.*

- 6.10.5 The objective of the standards relating to vehicular passing areas along an access, in this instance aims to ensure that the design and location of access and parking areas creates a safe environment for users by minimising the potential for conflicts involving vehicles, pedestrians and cyclists.

The proposal was referred to Council's Development Engineer who assessed the proposal and concluded that the submitted documents, enabled the vehicle passing areas to be accepted under E6.7.3P1 of the *Hobart Interim Planning Scheme 2015*.

- 6.10.6 The proposal complies with the performance criterion.

7. Discussion

- 7.1 Planning approval is sought for Partial Demotion, Alterations and Extension at 1/816 Sandy Bay Road Sandy Bay and Common Land of Parent Title.

- 7.2 The application was advertised and received five representations. The representations raised several concerns particularly the management of the existing visitor accommodation unit at 1/816 Sandy Bay Road and the impact on the surrounding neighbours. As stated above, the subject dwelling was approved as visitor accommodation under PLN-21-203 on 7 May 2021. As the management plan required under condition PLN 18 has not been submitted to Council the use should not have commenced. Council has written to the owner confirming that the management plan must be submitted to Council prior to the use commencing.

Other issues raised in the representations relate to the existing (lack of) sight distance when entering/exiting the driveway rendering it unsafe. The representors also raised the lack of information submitted to Council including the absence of shadow diagrams or retaining walls adjacent to the driveway works. It was also noted that the scale of the cars on the driveway plans indicated smaller vehicles than what was observed using the existing driveway, leading to the increase in onsite carparking.

The representors also stated that they believe that the site is unsuitable for further development and will result in a default motel on the property. As such the representors requested a reassessment of the dwelling, as short term visitor accommodation, due to the increase in floor area, thereby creating a third bedroom.

- 7.3 The proposal has been assessed against the relevant provisions of the planning scheme and is considered to perform well. The concern raised about shadow diagrams is not something which is prompted by the planning scheme, given that all new works fall within the building envelope and it therefore satisfies 12.4.2A3. The concerns about the vehicle movements and access have been considered by the development engineering team and are addressed above. Further detailed designs are required by conditions regarding the retaining structures. Given that this application is not for visitor accommodation, those issues cannot be considered in relation to this application.
- 7.4 The proposal has been assessed by other Council officers, including the Council's Development Engineer, Environmental Development Planner and Stormwater Services Engineer. The officers have raised no objection to the proposal, subject to conditions.
- 7.5 The proposal is recommended for approval.

8. Conclusion

- 8.1 The proposed Partial Demotion, Alterations and Extension at 1/816 Sandy Bay Road Sandy Bay and Common Land of Parent Title satisfies the relevant provisions of the *Hobart Interim Planning Scheme 2015*, and as such is recommended for approval.

9. Recommendations

That: Pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for Partial Demotion, Alterations and Extension at 1/816 Sandy Bay Road Sandy Bay and Common Land of Parent Title for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-21-454 - 1/816 SANDY BAY ROAD SANDY BAY TAS 7005 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

ENG sw1

All stormwater from the proposed development (including but not limited to: roofed areas, ag drains, retaining wall ag drains and impervious surfaces such as driveways and paved areas) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Advice: Under section 23 of the Urban Drainage Act 2013 it is an offence for a property owner to direct stormwater onto a neighbouring property.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

ENG 2a

Prior to first occupation or commencement of use (whichever occurs first),

vehicular barriers compliant with the Australian Standard AS/NZS1170.1:2002 must be installed to prevent vehicles running off the edge of an access driveway or parking module (parking spaces, aisles and manoeuvring area) where the drop from the edge of the trafficable area to a lower level is 600mm or greater, and wheel stops (kerb) must be installed for drops between 150mm and 600mm. Barriers must not limit the width of the driveway access or parking and turning areas approved under the permit.

Advice:

- *The Council does not consider a slope greater than 1 in 4 to constitute a lower level as described in AS/NZS 2890.1:2004 Section 2.4.5.3. Slopes greater than 1 in 4 will require a vehicular barrier or wheel stop.*
- *Designers are advised to consult the [National Construction Code 2016](#) to determine if pedestrian handrails or safety barriers compliant with the NCC2016 are also required in the parking module this area may be considered as a path of access to a building.*

Reason for condition

To ensure the safety of users of the access driveway and parking module and compliance with the standard.

ENG 3b

The following aspects of the access driveway and parking module (parking spaces and manoeuvring area) require further detailed designs:

1. Extent and depth of excavations abutting Council's highway reservation; and
2. Detailed design of any earth retaining structures abutting Council's highway reservation.

This documentation must be submitted and approved as a condition endorsement, prior to the issuing of any approval under the *Building Act 2016*. The detailed designs must:

1. be prepared and certified by a suitably qualified engineer;
2. be in accordance with the design EAST documentation received by the Council on the 1st December 2021;
3. be in accordance with the Australian Standard AS/NZS2890.1:2004, if possible;
4. where the design deviates from AS/NZS2890.1:2004 the designer must demonstrate that the design will provide a safe and efficient access, and

enable safe, easy and efficient use; and

5. show dimensions, levels, gradients & transitions, and other details as Council deem necessary to satisfy the above requirement; and

6. show cross-sections at 2 metre intervals along the length of the driveway abutting the Sandy Bay highway reservation showing the extent of excavations, earth retaining structures, cross fall gradients, existing natural surface level (NSL) and new design levels from the back of footpath for the width of the proposed driveway (including any batter slopes).

The access driveway and parking area must be constructed in accordance with the approved detailed designs prior to first occupation.

Advice:

- *This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.*
- *It is advised that designers consider the detailed design of the access and parking module prior to finalising the Finished Floor Level (FFL) of the parking spaces (especially if located within a garage incorporated into the dwelling), as failure to do so may result in difficulty complying with this condition.*

Reason for condition

To ensure the safety of users of the access and parking module, and compliance with the relevant Australian Standard.

ENG 3c

The access driveway and parking module (parking spaces, aisle and manoeuvring area) must be constructed in accordance with the design drawings approved by Condition ENG 3b.

Prior to the commencement of use, documentation by a suitably qualified engineer certifying that the access driveway and parking module has been constructed in accordance with the above drawings must be lodged with Council.

Advice:

- *Certification may be submitted to Council as part of the Building Act 2016 approval process or via condition endorsement (see general advice on how to*

obtain condition endorsement)

Reason for condition

To ensure the safety of users of the access and parking module, and compliance with the relevant Australian Standard.

ENG 4

The access driveway and parking module (car parking spaces, aisles and manoeuvring area) approved by this permit must be constructed to a sealed standard (spray seal, asphalt, concrete, pavers or equivalent Council approved) and surface drained to the Council's stormwater infrastructure prior to the commencement of use.

Reason for condition

To ensure the safety of users of the access driveway and parking module, and that it does not detract from the amenity of users, adjoining occupiers or the environment by preventing dust, mud and sediment transport.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. **Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or**
2. **Be repaired and reinstated by the owner to the satisfaction of the Council.**

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENG r1

The excavation and earth-retaining structures (i.e. cuttings, retaining walls) and/or footings supporting the highway reservation must not undermine the stability and integrity of the highway reservation and its infrastructure.

Detailed design drawings, structural certificates and associated geotechnical assessments of the excavation and earth-retaining structures supporting the Sandy Bay Road highway reservation must be submitted and approved as a Condition Endorsement, prior to the commencement of work and must:

1. **Be prepared and certified by a suitable qualified person and experienced engineer;**
2. **Not undermine the stability of the highway reservation;**
3. **Be designed in accordance with AS4678, with a design life in accordance with table 3.1 typical application major public infrastructure works;**
4. **Take into account any additional surcharge loadings as required by relevant Australian Standards;**
5. **Take into account and reference accordingly any Geotechnical findings;**
6. **Detail any mitigation measures required; and**
7. **Detail the design and location of the footing adjacent to Sandy Bay Road highway reservation.**

The structure certificated and/or drawings should note accordingly the above.

All work required by this condition must be undertaken in accordance with the approved select design drawing and structural certificates.

Advice: This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that the stability and integrity of the Council's highway reservation is not compromised by the development.

ENV 1

Sediment and erosion control measures sufficient to prevent sediment from leaving the site must be installed prior to any disturbance of the site, and maintained until all areas of disturbance have been stabilized or re-vegetated.

Advice: For further guidance in preparing a Soil and Water Management Plan – in accordance with Fact sheet 3 Derwent Estuary Program click [here](#).

Reason for condition

To avoid the sedimentation of roads, drains, natural watercourses, Council land that could be caused by erosion and runoff from the development, and to comply with relevant State legislation.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

OCCUPATION OF THE PUBLIC HIGHWAY

You may require a permit for the occupation of the public highway for construction (e.g. placement of skip bin, crane, scissor lift etc). Click [here](#) for more information.

DRIVEWAY SURFACING OVER HIGHWAY RESERVATION

If a coloured or textured surface is used for the driveway access within the Highway Reservation, the Council or other service provider will not match this on any reinstatement of the driveway access within the Highway Reservation required in the future.

STRATA AMENDMENT

You will be required to amend the strata plan pursuant to the provisions of the *Strata Titles Act 1998* in order to reflect the completed development works. Click [here](#) for more information.

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.



(Deanne Lang)

Development Appraisal Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Karen Abey)

Manager Development Appraisal

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Date of Report: 18 January 2022

Attachment(s):

Attachment B - CPC Agenda Documents

SHEET No. 1 OF 10

PROPOSED ALTERATIONS & ADDITIONS at UNIT 1 816 SANDY BAY ROAD, 7005 for SHANE FARMER		DE JOB # 5426
ISSUE: DEVELOPMENT APPLICATION REVC 1 Dec 2021		
DWG. No.	DRAWING	ISSUE
5426 - A01	DRAWING INDEX	C
5426 - A02	SITE PLAN	C
5426 - A03	EXISTING & DEMOLITION FLOOR PLANS	C
5426 - A04	PROPOSED FLOOR PLANS	C
5426 - A05	NORTH ELEVATIONS	C
5426 - A06	EAST ELEVATIONS	C
5426 - A07	SOUTH ELEVATIONS	C
5426 - C01	PROPOSED DRIVEWAY FINISHED LEVELS	C
5426 - C02	DRIVEWAY SECTIONS	C
5426 - C03	TURNING TEMPLATES	C

GENERAL INFORMATION	
Accredited Building Designer:	Monty East
Accreditation Number:	CC 1910
Land title reference number:	C. T. 104885 / 1
Site area:	354 m²

153A Davey Street Hobart
Tasmania 7000
Phone (03) 9222 6740
Email design@designeast.com.au
Web www.designeast.com.au
Accreditation No. CC1910

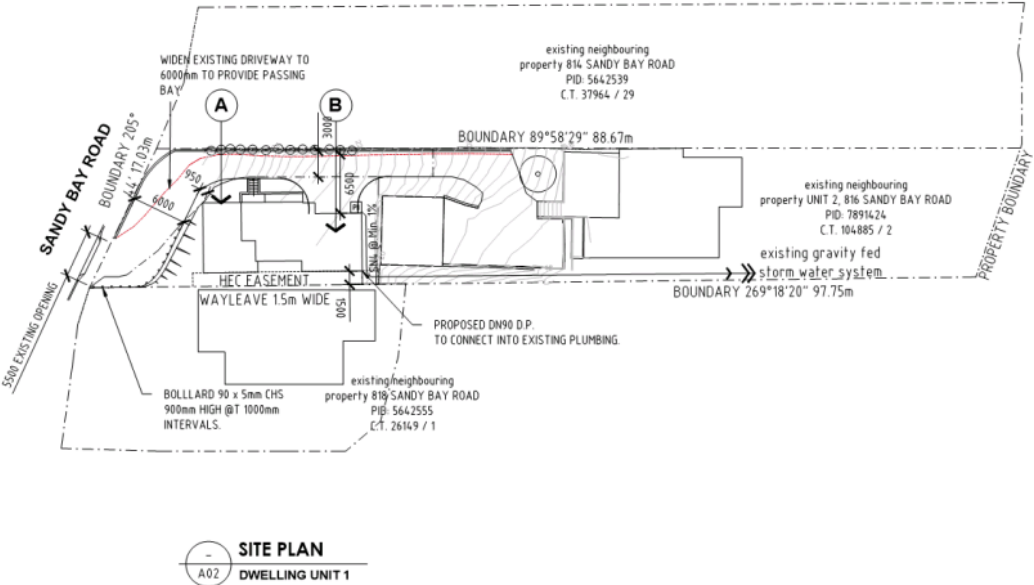
SITE NOTES	
Property Address:	UNIT 1, 816 SANDY BAY ROAD
Property ID:	7891416
Title Reference:	104885 / 1
Site Area:	354
Municipality:	HOBART
Owner:	SHANE FARMER

SITE KEY	
A	OUTLINE OF EXISTING RESIDENCE.
B	PROPOSED ALTERATIONS ADDITIONS SHOWN HATCHED.

SITE COVERAGE	
EX. SITE COVERAGE	= 26.8% +/-
PROPOSED SITE COVERAGE	= 34% +/-

CAR PARKING	
ex. CAR PARKING SPACES	= 2
PROPOSED CAR PARKING SPACES	= 2

PLUMBING LEGEND	
MARK	DESCRIPTION
—	STORMWATER PIPES TO BE PVC-U Class SN4 @ Min. 1% (to AS/NZS 1254-2010) DOWN PIPE SIZE 90mm / PIPE SIZE 100MM
P1	'ACO' GRATED PIT TYPE 66 Size: 600mm SQ. x 600mm (DI). Gate: Type 66 Galvanised Heelguard Gate. Min. Load Class: B (80 kN).



SHEET No. 2 OF 10

ISSUE	DESCRIPTION	DATE	DRAWN
C	PLANNING REF		

Project:	PROPOSED GARAGE, DECK and ALTERATIONS 1/816 SANDY BAY ROAD For SHANE FARMER
Drawing:	SITE PLAN

SCALE:	1:500 @ A3
DATE:	22/07/21
DRAWN:	ME

153 Davey Street Hobart Tasmania 7000 Phone (03) 6223 6740 Email design@designeast.com.au Web www.designeast.com.au Accreditation No. CC1910

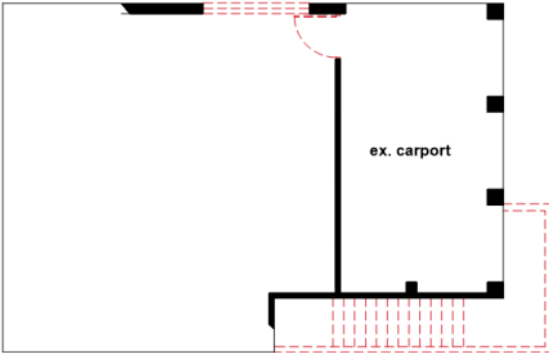


design **EAST**
building design and interior architecture

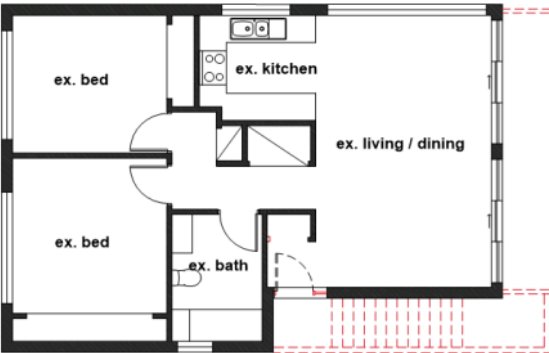
LEGEND	
MARK	DESCRIPTION
	EXISTING WALLS TO BE RETAINED.
	EXISTING WALLS TO BE DEMOLISHED.

EXISTING DWELLING AREA	
EXISTING LOWER FLOOR AREA (CARPORT)	= 23.5 ± sqm
EXISTING UPPER FLOOR AREA	= 78.5 ± sqm
EXISTING DECK AREA	= 8.5 ± sqm

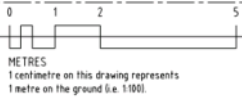
DEMOLITION NOTES
GENERALLY DEMOLITION WORKS MUST BE CARRIED OUT IN ACCORDANCE WITH AS 2601-2001: DEMOLITION OF STRUCTURES & REGULATIONS 29, 30 & 31 OF THE BUILDING REGULATIONS (Tas.) 2019.
BUILDINGS PRIOR TO 1990 MAY CONTAIN ASBESTOS. BUILDINGS PRIOR TO 1986 ARE LIKELY TO CONTAIN ASBESTOS EITHER IN CLADDING MATERIAL OR IN FIRE RETARDANT INSULATION MATERIAL. THE BUILDER SHOULD CHECK &, IF NECESSARY, TAKE APPROPRIATE ACTION BEFORE DEMOLISHING, CUTTING, SANDING, DRILLING OR OTHERWISE DISTURBING THE EXISTING STRUCTURE.
PROCEDURES & METHODS OF DEMOLITION MUST BE ADEQUATE TO PREVENT INJURY TO PERSONS & AVOID DAMAGE TO NEIGHBORING PROPERTY.
BEFORE REMOVING EXISTING WALLS SHOWN TO BE DEMOLISHED, BUILDER SHALL CONFIRM ON-SITE WHETHER THEY ARE LOAD-BEARING OR NOT. IF IT IS FOUND THAT THEY ARE LOAD-BEARING, A STRUCTURAL ENGINEER MUST BE ENGAGED TO DETERMINE ANY BEAMS REQUIRED TO SUPPORT THESE EXISTING LOADS.
ALL REDUNDANT STORMWATER, SEWER & WATER CONNECTIONS ASSOCIATED WITH THE DEMOLITION SHALL BE CUT & SEALED TO THE SATISFACTION OF COUNCIL'S SENIOR PLUMBING INSPECTOR.
THE REMOVAL OF EXISTING PLUMBING FIXTURES SHALL INCLUDE ALL ASSOCIATED WASTE & VENT PIPES, FLOOR DRAINS, WATER SERVICE PIPEWORK BRACKETS, SUPPORTS etc & SEAL OFF EXISTING SERVICES. SEAL OFF & MAKE GOOD ALL FLOOR, WALL & ROOF PENETRATIONS.
GENERALLY, MAKE GOOD TO EXISTING FLOORS, WALLS & CEILINGS WHERE ALL DEMOLITION WORK OCCURS TO MATCH EXISTING AS & WHERE REQUIRED.



EXISTING LOWER FLOOR PLAN



EXISTING UPPER FLOOR PLAN



design

EAST
building design and interior architecture

153 Davey Street Hobart
Tasmania 7000
Phone 03 6223 6740
Email design@designeast.com.au
Web www.designeast.com.au
Accreditation No. CC1910

SCALE:	1:100 @ A3
DATE:	22/07/21
DRAWN:	ME

Project:	PROPOSED GARAGE, DECK and ALTERATIONS 1/816 SANDY BAY ROAD For SHANE FARMER
Drawing:	EXISTING & DEMOLITION FLOOR PLAN

SHEET No. 3 OF 10

ISSUE	DESCRIPTION	DATE	DRAWN

design EAST registered trading name for design EAST Pty. Ltd.

SHEET No. 4 OF 10

MARK	DESCRIPTION
	EXISTING WALLS TO BE RETAINED.
	190mm BLOCKWORK RETAINING WALL.
	90mm STUDWORK WALL (internal wall).
	BRICK VENEER WALL. 255mm (to match existing)

MARK	DESCRIPTION
	PHOTOELECTRIC SMOKE ALARM (HARD WIRED) TO COMPLY WITH BCA 3.7.2 & AS 3786 (must be interconnected where there is more than one alarm).

MARK	DESCRIPTION
	'ACO' GRATED PIT TYPE 66 Size: 600mm SQ. x 600mm (D). Grate: Type 66 Galvanised Heelguard Grate. Min. Load Class: B (80 kN).

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design
building design and interior architecture

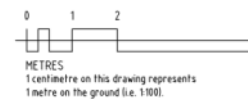
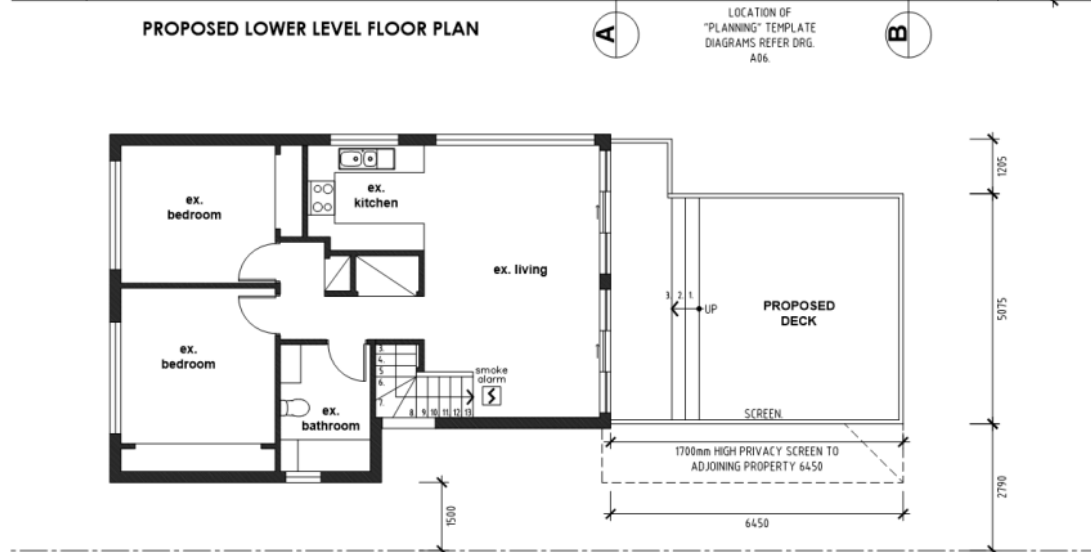
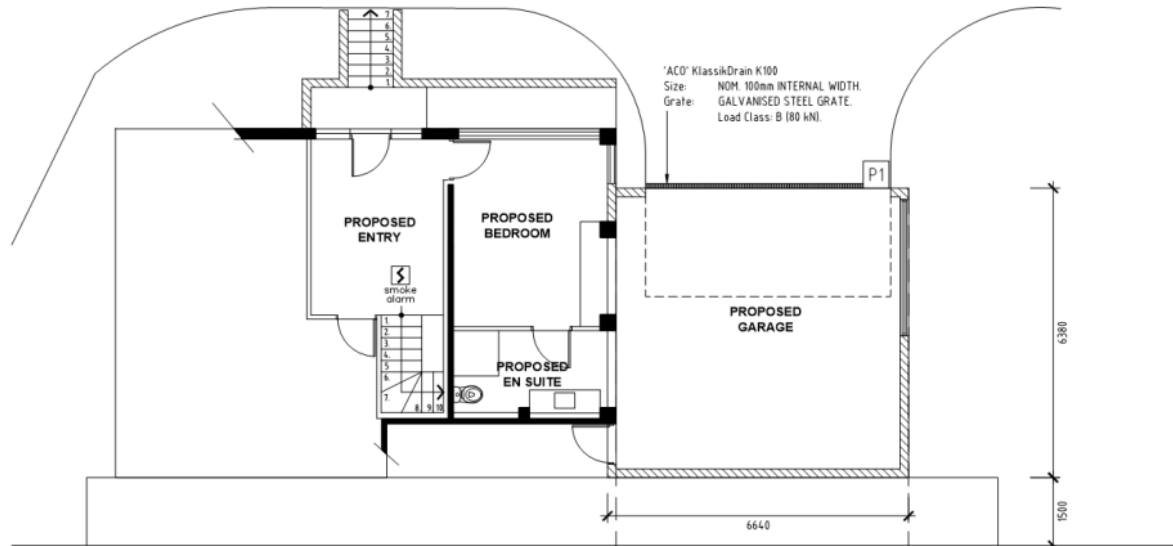
ISSUE	DESCRIPTION	DATE	DRAWN

Project:	PROPOSED GARAGE, DECK and ALTERATIONS 1/816 SANDY BAY ROAD For SHANE FARMER
Drawn:	PROPOSED FLOOR PLAN

Scale:	1:100 @ A3
Date:	22/07/21
Drawn:	ME

153 Davey Street Hobart Tasmania 7000 Phone (03) 6223 6740 Email design@designeast.com.au Web www.designeast.com.au Accreditation No. CC1910

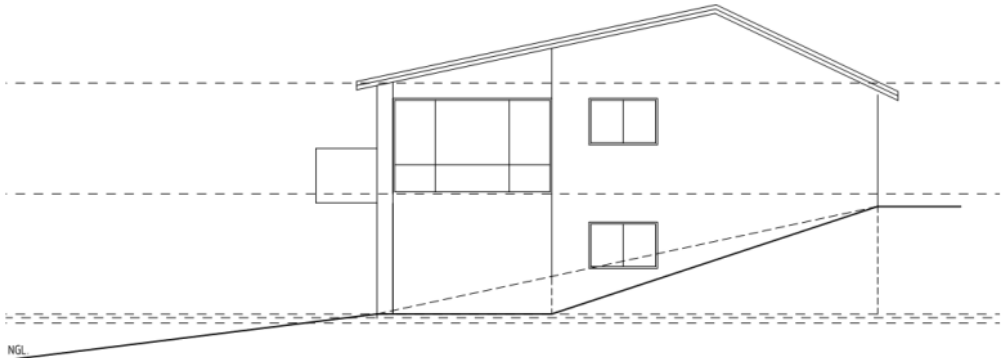
EAST
design
building design and interior architecture



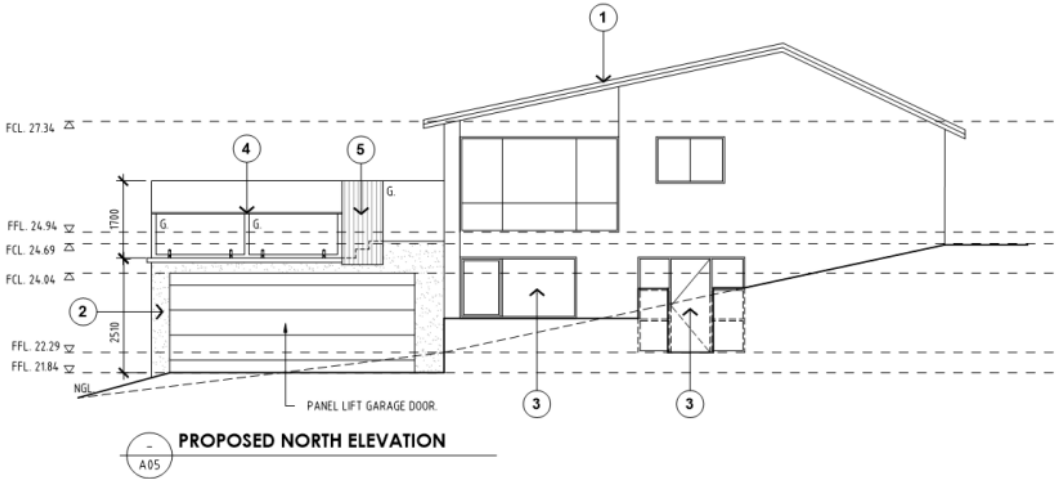
design

building design and interior architecture

EXTERNAL FINISHES	
1	EXISTING DWELLING
2	RENDERED BLOCK WORK - PAINT FINISH
3	ALUMINIUM WINDOWS AND DOORS.
4	GLASS BALUSTRADE
5	VERTICAL TIMBER SCREENING
6	CUSTOM ORB - COLORBOND COLOR TO BE SELECTED. 45 DEGREES.
LEGEND	
EX.	- EXISTING WINDOW / DOOR.
F.	- FIXED WINDOW.
A.	- AWNING WINDOW.
G.	- GLAZED HINGED DOOR.
S.	- SLIDING WINDOW.



EXISTING NORTH ELEVATION
A05



PROPOSED NORTH ELEVATION
A05

SHEET No. 5 OF 10

ISSUE	DESCRIPTION	DATE	DRAWN

Project:	PROPOSED GARAGE, DECK and ALTERATIONS 1/816 SANDY BAY ROAD For SHANE FARMER
Drawn:	NORTH ELEVATIONS design/EAST registered trading name for design/EAST Pty. Ltd

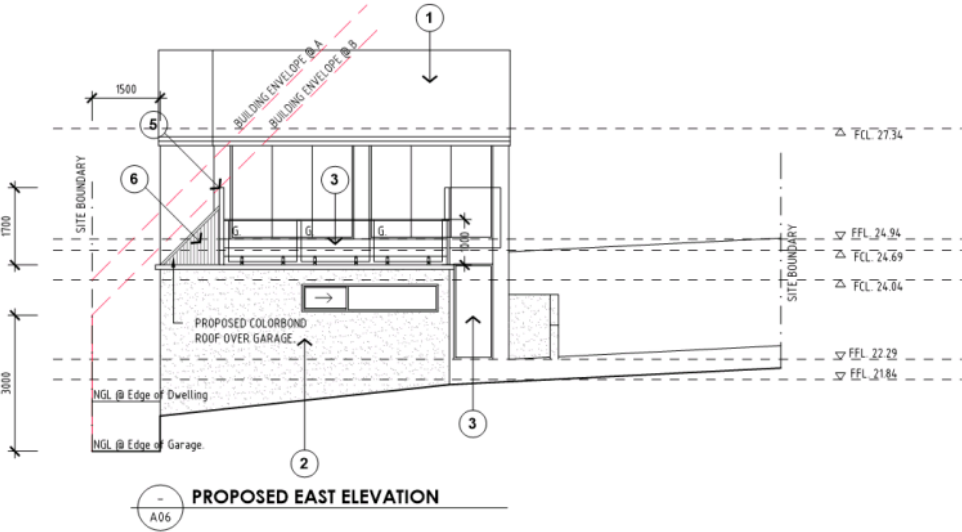
SCALE:	ORIG. NO:	DATE:
1:100 @ A3	A05	22/07/21
DRAWN:		
ME		

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EXTERNAL FINISHES	
1	EXISTING DWELLING
2	RENDERED BLOCK WORK - PAINT FINISH
3	ALUMINUM WINDOWS AND DOORS.
4	GLASS BALUSTRADE
5	VERTICAL TIMBER SCREENING
6	CUSTOM ORB - COLORBOND COLOR TO BE SELECTED. 45 DEGREES.
LEGEND	
EX.	- EXISTING WINDOW / DOOR.
F.	- FIXED WINDOW.
A.	- AWNING WINDOW.
G.	- GLAZED HINGED DOOR.
S.	- SLIDING WINDOW.



NOTE:
ALL NEW WORK GARAGE & SCREEN ARE WITHIN THE
PLANNING ENVELOPE.



SHEET No. 6 OF 10

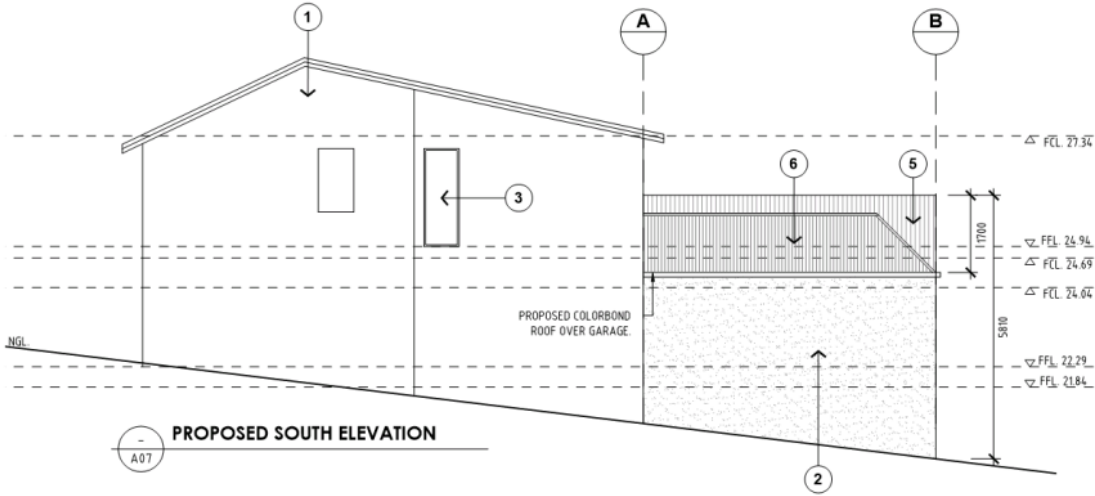
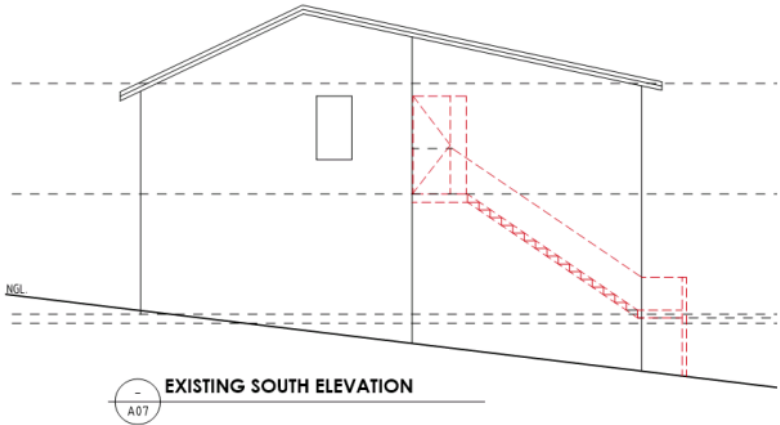
ISSUE	DESCRIPTION	DATE	DRAWN

Project:	PROPOSED GARAGE, DECK and ALTERATIONS 1/816 SANDY BAY ROAD For SHANE FARMER
Drawing:	EAST ELEVATIONS
designEAST Registered trading name for design EAST Pty. Ltd	

SCALE:	ORIG. NO:
1:100 @ A3	A06
DATE:	22/07/21
DRAWN:	ME

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EXTERNAL FINISHES	
1	EXISTING DWELLING
2	RENDERED BLOCK WORK - PAINT FINISH
3	ALUMINUM WINDOWS AND DOORS.
4	GLASS BALUSTRADE
5	VERTICAL TIMBER SCREENING
6	CUSTOM ORB - COLORBOND COLOR TO BE SELECTED. 45 DEGREES.
LEGEND	
EX.	- EXISTING WINDOW / DOOR.
F.	- FIXED WINDOW.
A.	- AWNING WINDOW.
G.	- GLAZED HINGED DOOR.
S.	- SLIDING WINDOW.



SHEET No. 7 OF 10

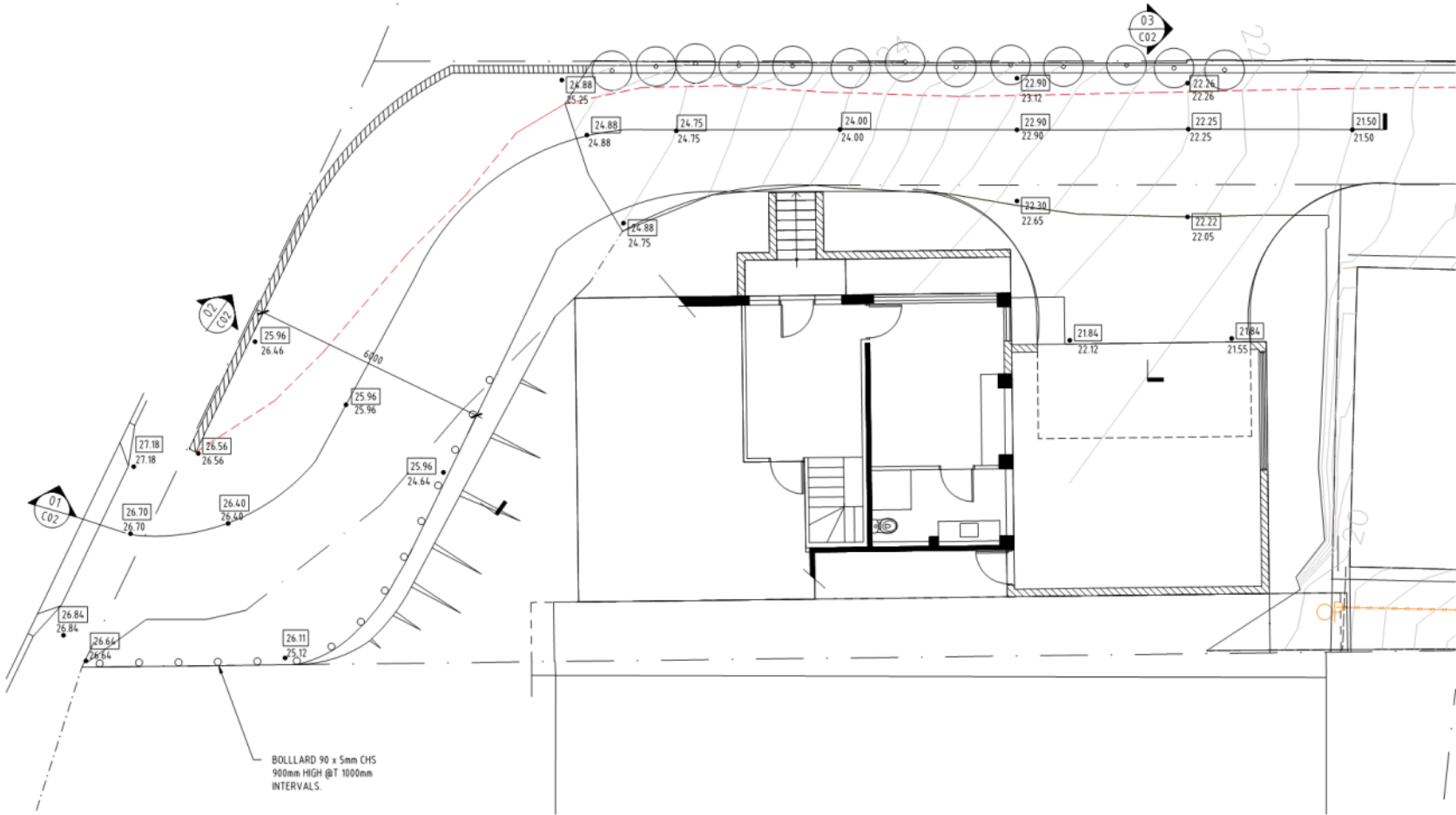
ISSUE	DESCRIPTION	DATE	DRAWN

Project:	PROPOSED GARAGE, DECK and ALTERATIONS 1/816 SANDY BAY ROAD For SHANE FARMER
Drawn:	SOUTH ELEVATIONS
Design:	design EAST registered trading name for design EAST Pty. Ltd.

SCALE:	1:100 @ A3
DATE:	22/07/21
DRAWN:	ME

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SPOT LEVELS	
MARK	DESCRIPTION
• 5154	existing level.
• 5181	PROPOSED LEVEL.



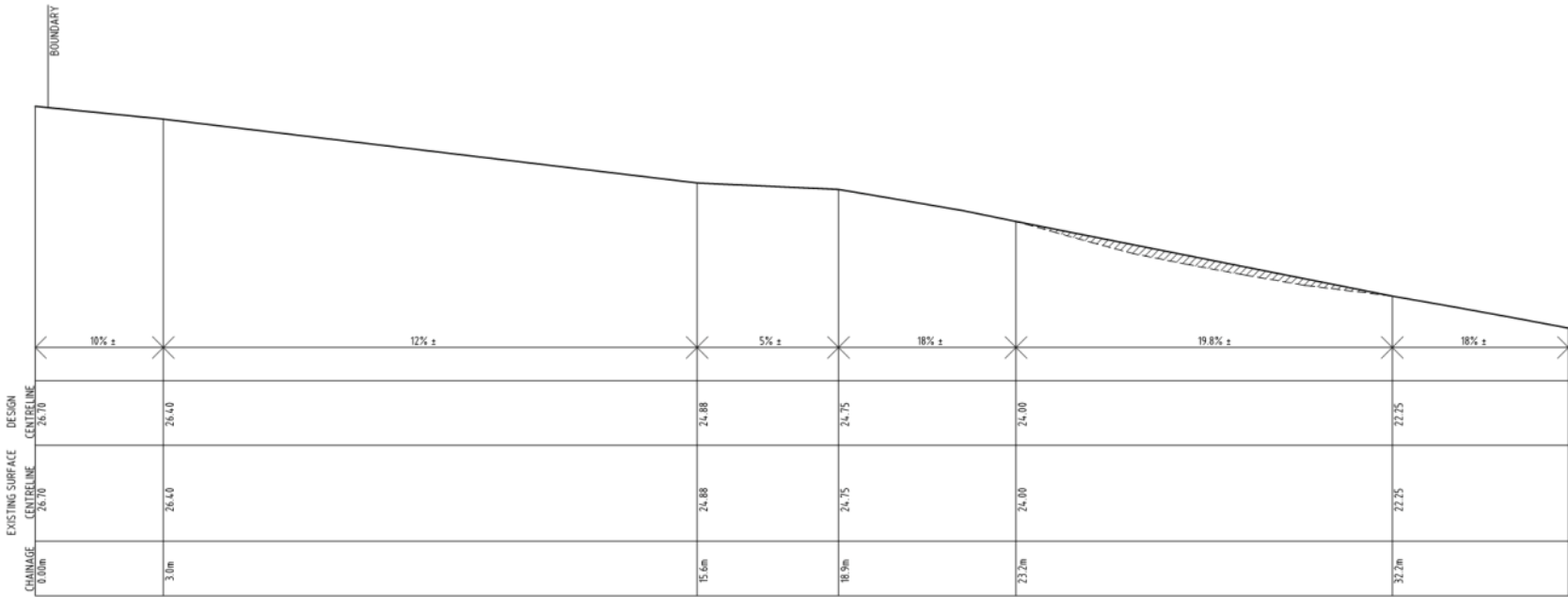
SHEET No. 8 OF 10

ISSUE	DESCRIPTION	DATE	DRAWN

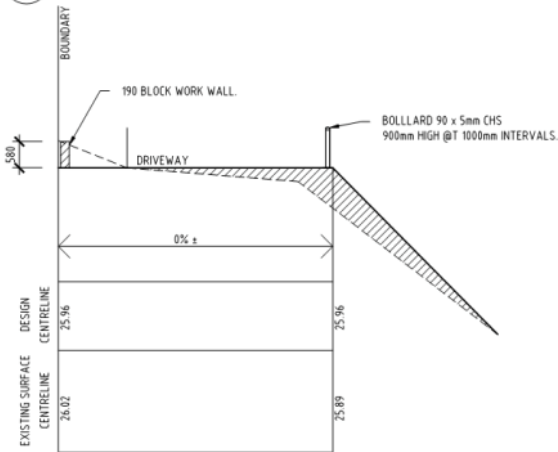
Project:	PROPOSED GARAGE DECK and ALTERATIONS 1/816 SANDY BAY ROAD For SHANE FARMER
Drawn:	PROPOSED DRIVEWAY FINISHED LEVELS design:EAST registered trading name for design:EAST Pty. Ltd

SCALE:	ORIG. NO:
1:100 @ A3	C01
DRAWN:	DATE:
ME	22/07/21

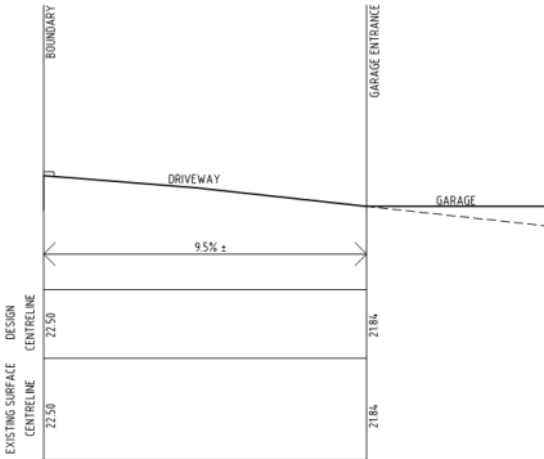
153 Davey Street Hobart Tasmania 7000 Phone (03) 6223 6740 Email design@designeast.com.au Web www.designeast.com.au Accreditation No. CC 91 0
--



01
C01 DRIVE WAY SECTION 1 1:100



02
C01 DRIVE WAY CROSS SECTION 2 1:100



03
C01 DRIVE WAY CROSS SECTION 3 1:100

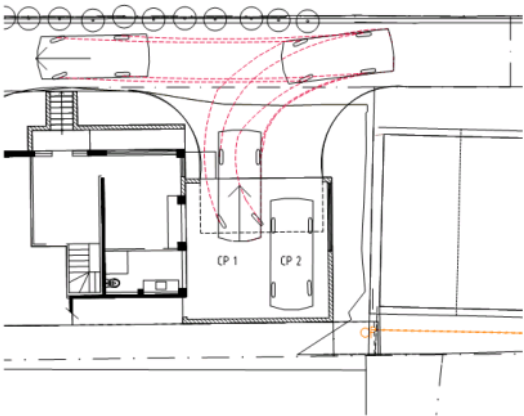
SHEET No. 9 OF 10

ISSUE	DESCRIPTION	DATE	DRAWN

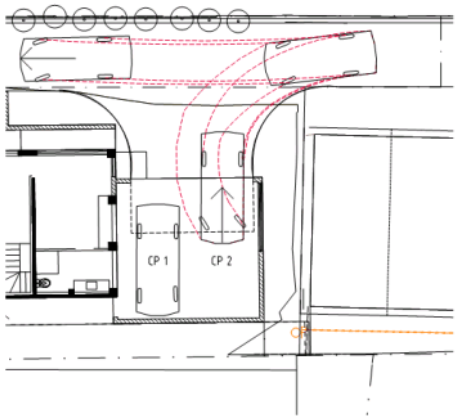
Project:	PROPOSED GARAGE, DECK and ALTERATIONS 1/816 SANDY BAY ROAD For SHANE FARMER
Drawing:	DRIVEWAY SECTIONS
design EAST registered trading name for design EAST Pty. Ltd	

SCALE:	1:100
ORIGIN:	C02
DATE:	22/07/21
DRAWN:	ME

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CAR PARK 1 EXITING



CAR PARK 2 EXITING

SHEET No. 10 OF 10

ISSUE	DESCRIPTION	DATE	DRAWN

Project:	PROPOSED GARAGE, DECK and ALTERATIONS 1/816 SANDY BAY ROAD For SHANE FARMER
Drawn:	TURNING TEMPLATES
design EAST registered trading name for design EAST Pty. Ltd	

SCALE:	ORIG. NO:
1:100 @ A3	C03
DRAWN:	DATE:
ME	22/07/21

153 Davey Street Hobart Tasmania 7000 Phone (03) 6223 6740 Email design@designeast.com.au Web www.designeast.com.au Accreditation No. CC1910

Planning: #235878

Property

1/816 SANDY BAY ROAD SANDY BAY TAS 7005

People

Applicant

*

DESIGN EAST PTY LTD
03 6223 6740
meast@designeast.com.au

Owner

*

Shane Farmer
2/816 Sandy Bay Road
SANDY BAY TAS 7005
0447517922
srfguru@gmail.com

Entered By

DESIGN EAST PTY LTD
03 6223 6740
meast@designeast.com.au**Use**

Multiple dwellings

Details

Have you obtained pre application advice?

☒ Yes

If YES please provide the pre application advice number eg PAE-17-xx

PAE-21-164

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. If you are not the owner of the property you MUST include signed confirmation from the owner that they are aware of this application.

☒ No

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the number of signs under Other Details below.

☒ No

If this application is related to an enforcement action please enter Enforcement Number

Details

What is the current approved use of the land / building(s)?

Residential

Please provide a full description of the proposed use or development (i.e. demolition and new dwelling, swimming pool and garage)

New Bedroom, New Garage and associated works

Estimated cost of development

140000.00

Existing floor area (m2)

78.50

Proposed floor area (m2)

160.00

Site area (m2)

35.4

Carparking on Site

Total parking spaces

2

Existing parking spaces

1

N/A

Other (no selection chosen)

Other Details

Does the application include signage?

No

How many signs, please enter 0 if there are none involved in this application?

0

Tasmania Heritage Register

Is this property on the Tasmanian Heritage Register?

No

Documents

Required Documents

Title (Folio text and Plan and Schedule of Easements)

816 Sandy Bay Road - TITLE.pdf

Plans (proposed, existing)

816 Sandy Bay Road - Planning Drawings - 2.07.2021.pdf

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 104885	FOLIO 1
EDITION 6	DATE OF ISSUE 23-Mar-2021

SEARCH DATE : 24-Jun-2021

SEARCH TIME : 09.37 AM

DESCRIPTION OF LAND

City of HOBART

Lot 1 on Strata Plan 104885 and a general unit entitlement
operating for all purposes of the Strata Scheme being a 1
undivided 1/2 interest

Derived from Strata Plan 104885

Derivation : Part of 72a 3r 34ps Gtd to Vernon William Hookey

SCHEDULE 1M870479 TRANSFER to SHANE RONALD FARMER Registered
23-Mar-2021 at 12.01 PMSCHEDULE 2

Reservations and conditions in the Crown Grant if any

The registered proprietor holds the lot and unit entitlement
subject to any interest noted on common property

Folio of the Register volume 104885 folio 0

B658785 BURDENING EASEMENT: Wayleave Easement for the Hydro
Electric Commission over the HEC Wayleave Easement on
Diagram No 104884 Registered 25-May-1993 at noonE254348 MORTGAGE to First Mortgage Company Home Loans Pty Ltd
Registered 23-Mar-2021 at 12.02 PMUNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



104885

Conveyancing and Law of Property Act 1884

STRATUM PLAN

REGISTERED NUMBER

104885

Sheet 1 of 3 Sheets

City or Town HOBART

Locality SANDY BAY

Reference to Title C.T. 4794 - 27

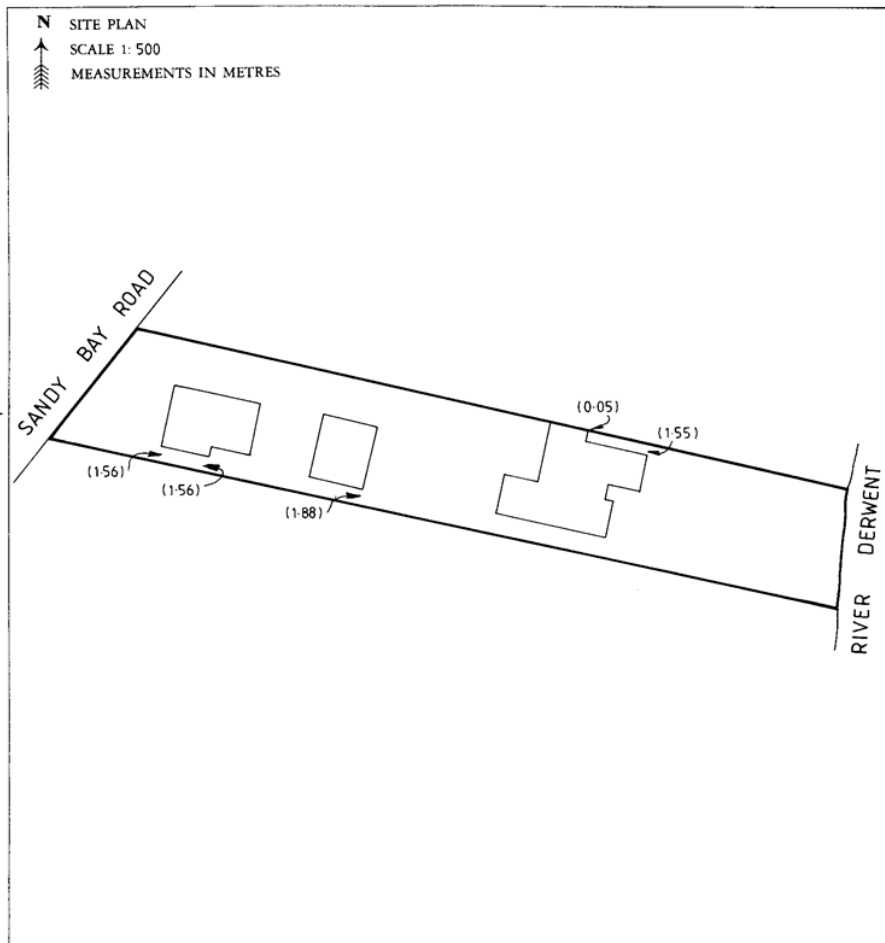
Site comprises the whole portion of Lot 1 on Plan Diagram No. D.104884 in the

27/03/93 D655 CASHIER.01
L.T.O OTHER FEES \$320.00

Lands Titles Office

The name of the building is 816 SANDY BAY ROAD, SANDY BAY HOBART

External
surface
boundaries of
the site and
the location of
the building
in relation
thereto to
be delineated
in this space



REGISTERED this 25th day of MAY 1993, No. 104885

This plan is lodged for registration by
GUNSON, PICKARD, & HANN.

Recorder of Titles

OS-C 754



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

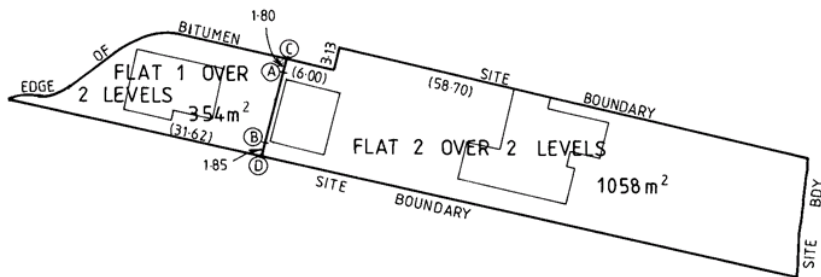


Sheet 2 of 3 Sheets

No. 104885

Town Clerk/Council Clerk

1:500



THE HORIZONTAL BOUNDARIES ARE SHOWN BY HEAVY UNBROKEN LINES DEFINED BY:

- SITE BOUNDARIES
- THE EDGE OF BITUMEN
- THE EXTERNAL EDGE OF GUTTERING LABELLED (A)-(B)
- MEASUREMENT WHERE BOUNDARY IS OPEN
- (A) (C) & (B) (D) ARE THE PROLONGATION OF (A) (B)
- MEASUREMENTS IN BRACKETS ARE FOR BOUNDARY FIXATION ONLY

THE VERTICAL FLAT BOUNDARIES EXTEND FROM 2.00m BELOW GROUND LEVEL TO 10.00m ABOVE GROUND LEVEL

FLAT N°	FLOOR AREA	GARAGE & STORAGE AREA	OPEN SPACE AREA
1	77m ²	77m ²	200m ²
2	206m ²	52m ²	800m ²



FOLIO PLAN

RECORDED OF TITLES

Issued Pursuant to the Land Titles Act 1980



Sheet 3 of 3 Sheets

No. 104885

~~Town Clerk/Council Clerk~~

The address for service of notices on the company is:—

816 SANDY BAY ROAD,
SANDY BAY, 7005

UNIT ENTITLEMENTS

[illegible]

SURVEYOR'S CERTIFICATE

I, CRAIG BRADY ROGERSON

of HOWRAH

a surveyor registered under the *Land Surveyor's Act* 1909, hereby certify that the building erected on the site described and delineated on sheet 1 of this plan is within the external boundaries of the title stated on sheet 1.

Dated this 20 day of NOVEMBER 1992.

Registered Surveyor

COUNCIL CLERK'S CERTIFICATE

I certify that the subdivision shown in this plan
has been approved by the

HOBART CITY Council

Dated this 9TH day of MARCH 1993

~~Town Clerk/Council Clerk~~

FOR OFFICE USE ONLY

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 104885	FOLIO 2
EDITION 8	DATE OF ISSUE 27-Sep-2017

SEARCH DATE : 17-Feb-2021

SEARCH TIME : 01.53 PM

DESCRIPTION OF LAND

City of HOBART

Lot 2 on Strata Plan 104885 and a general unit entitlement
operating for all purposes of the Strata Scheme being a 1
undivided 1/2 interest

Derived from Strata Plan 104885

Derivation : Part of 72a 3r 34ps Gtd to Vernon William Hookey

SCHEDULE 1

M653687 TRANSFER to SHANE RONALD FARMER Registered
27-Sep-2017 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

The registered proprietor holds the lot and unit entitlement
subject to any interest noted on common property

Folio of the Register volume 104885 folio 0

B658785 BURDENING EASEMENT: Wayleave Easement for the Hydro
Electric Commission over the HEC Wayleave Easement on
Diagram No 104884 Registered 25-May-1993 at noon

E107361 MORTGAGE to First Mortgage Company Home Loans Pty Ltd
Registered 27-Sep-2017 at 12.02 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



104885

Conveyancing and Law of Property Act 1884

REGISTERED NUMBER

104885

STRATUM PLAN

Sheet 1 of 3 Sheets

City or Town HOBART

Locality SANDY BAY

Reference to Title C.T. 4794 - 27

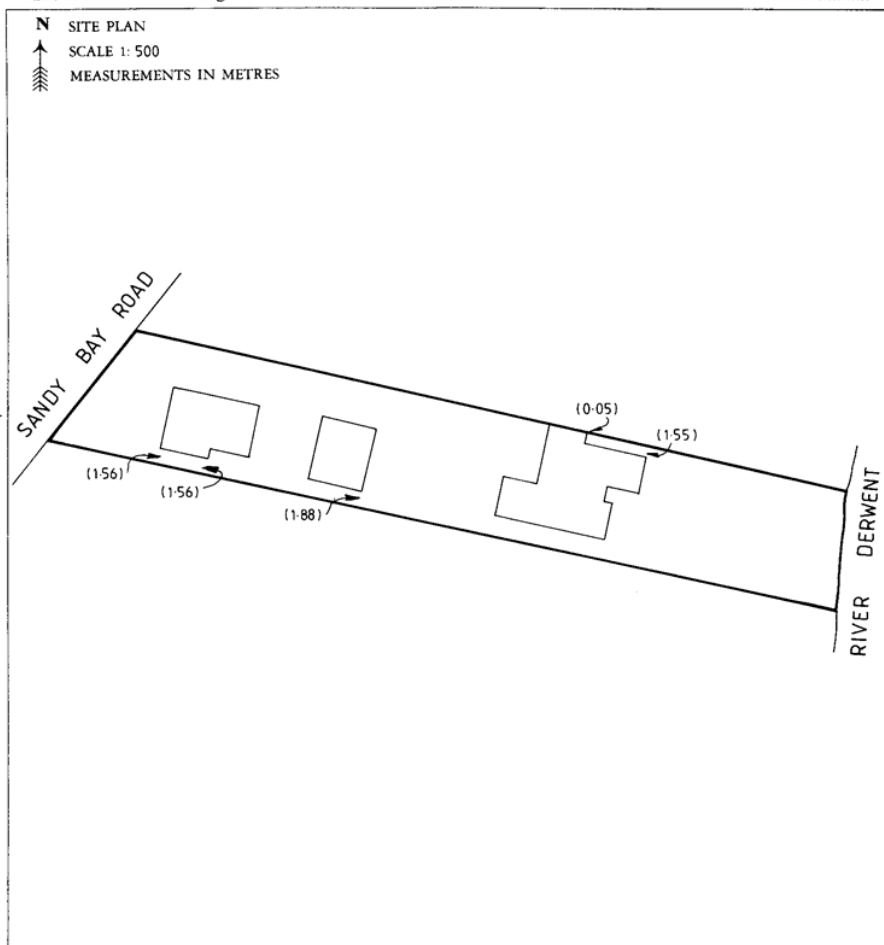
Site comprises the whole portion of Lot 1 on Plan Diagram No. D.104884 in the

27/03/93 D655 CASHIER.01
L.T.O OTHER FEES *320.00

Lands Titles Office

The name of the building is 816 SANDY BAY ROAD, SANDY BAY HOBART

External
surface
boundaries of
the site and
the location of
the building
in relation
thereto to
be delineated
in this space



REGISTERED this 25th day of MAY 1993, No. 104885

This plan is lodged for registration by
GUNSON, PICKARD, & HANN.

Recorder of Titles

OS-C 754



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

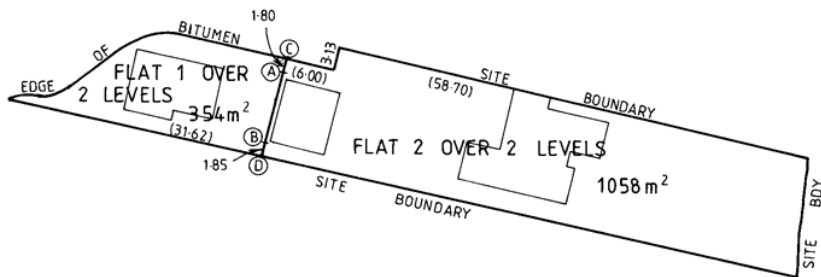


Sheet 2 of 3 Sheets

No. 104885

Town Clerk/Council Clerk

1:500



THE HORIZONTAL BOUNDARIES ARE SHOWN BY HEAVY UNBROKEN LINES DEFINED BY:

- SITE BOUNDARIES
- THE EDGE OF BITUMEN
- THE EXTERNAL EDGE OF GUTTERING LABELLED (A)-(B)
- MEASUREMENT WHERE BOUNDARY IS OPEN
- (A) (C) & (B) (D) ARE THE PROLONGATION OF (A) (B)
- MEASUREMENTS IN BRACKETS ARE FOR BOUNDARY FIXATION ONLY

THE VERTICAL FLAT BOUNDARIES EXTEND FROM 2.00m BELOW GROUND LEVEL TO 10.00m ABOVE GROUND LEVEL

FLAT N°	FLOOR AREA	GARAGE & STORAGE AREA	OPEN SPACE AREA
1	77m ²	77m ²	200m ²
2	206m ²	52m ²	800m ²



FOLIO PLAN

RECORDED OF TITLES

Issued Pursuant to the Land Titles Act 1980



Sheet 3 of 3 Sheets

No. 104885

~~Town Clerk/Council Clerk~~

The address for service of notices on the company is:—

816 SANDY BAY ROAD,
SANDY BAY, 7005

SURVEYOR'S CERTIFICATE

I, CRAIG BRADLEY ROGERSON

of HOWRAH

a surveyor registered under the *Land Surveyor's Act* 1909, hereby certify that the building erected on the site described and delineated on sheet 1 of this plan is within the external boundaries of the title stated on sheet 1.

Dated this 20 day of NOVEMBER 1992.

Registered Surveyor

COUNCIL CLERK'S CERTIFICATE

I certify that the subdivision shown in this plan
has been approved by the

HOBART CITY Council

Dated this 9TH day of MARCH 1993

~~Town Clerk/Council Clerk~~

FOR OFFICE USE ONLY

[illegible]

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME 104885	FOLIO 0
EDITION 2	DATE OF ISSUE 13-Apr-2006

SEARCH DATE : 24-Jun-2021

SEARCH TIME : 09.37 AM

DESCRIPTION OF LAND

City of HOBART

The Common Property for Strata Scheme 104885

Derivation : Part of 72a 3r 34ps Gtd to Vernon William Hookey

Prior CT 4794/27

SCHEDULE 1

STRATA CORPORATION NUMBER 104885, 816 SANDY BAY ROAD, HOBART

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

B658785 BURDENING EASEMENT: Wayleave Easement for the Hydro

Electric Commission over the HEC Wayleave Easement on

Diagram No 104884 Registered 25-May-1993 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

**7.1.3 62-66 CLARE STREET, NEW TOWN - PARTIAL DEMOLITION,
ALTERATIONS AND EXTENSION
PLN-21-693 - FILE REF: F22/4027**

Address: 62-66 Clare Street, New Town
Proposal: Partial Demolition, Alterations and Extension
Expiry Date: 16 February 2022
Extension of Time: Not applicable
Author: Adam Smee

RECOMMENDATION

That pursuant to the *Hobart Interim Planning Scheme 2015*, the Council approve the application for partial demolition, alterations and extension at 62-66 Clare Street, New Town 7008 for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-21-693 - 62-66 CLARE STREET NEW TOWN TAS 7008 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

ENG sw1

All stormwater from the proposed development (including but not limited to: roofed areas, ag drains, retaining wall ag drains and impervious surfaces such as driveways and paved areas) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Advice:

Under section 23 of the Urban Drainage Act 2013 it is an offence for

a property owner to direct stormwater onto a neighbouring property.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

SW 9

Prior to occupancy or the commencement of the approved use (whichever occurs first), stormwater discharges from the development must be installed.

A stormwater management report and design must be submitted and approved prior to the issue of any approval under the *Building Act 2016* or the commencement of work on the site (whichever occurs first). The stormwater management report and design must be prepared by a suitably qualified engineer and must:

1. Include detailed design and supporting calculations of the detention tank showing:
 1. detention tank sizing such that there is no increase in flows from the developed site up to 5% AEP event and no worsening of flooding;
 2. the layout, the inlet and outlet (including long section), outlet size, overflow mechanism and invert level;
 3. the discharge rates and emptying times; and
 4. all assumptions must be clearly stated;
2. Include a supporting maintenance plan, which specifies the required maintenance measures to check and ensure the ongoing effective operation of all systems, such as: inspection frequency; cleanout procedures; descriptions and diagrams of how the installed systems operate; details of the life of assets and replacement requirements.

All work required by this condition must be undertaken and maintained in accordance with the approved stormwater management report and design.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or
2. Be repaired and reinstated by the owner to the satisfaction of the Council.

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENV 1

Sediment and erosion control measures sufficient to prevent sediment from leaving the site must be installed prior to any disturbance of the site, and maintained until all areas of disturbance have been stabilized or re-vegetated.

Advice:

For further guidance in preparing a Soil and Water Management Plan – in accordance with Fact sheet 3 Derwent Estuary Program click [here](#).

Reason for condition

To avoid the sedimentation of roads, drains, natural watercourses, Council land that could be caused by erosion and runoff from the development, and to comply with relevant State legislation.

HER 18

The Radiata Pine trees must be protected throughout excavation and post construction.

A report must be submitted for approval as a Condition Endorsement prior to the commencement of work. The report must:

1. Be prepared by a suitable qualified person; and
2. Show all tree protection zones and relevant measures specified under Section 3 Determining the Protection Zones of the Selected Trees, Section 4 Tree Protection Measures and Section 5 Monitoring and Certification of AS 4970-2009 Protection of trees on development sites, around the Radiata Pine.

All work required by this condition must be undertaken in accordance with the approved report.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that development at a heritage place is undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance.

OPS 3

The four Pittosporum trees identified for removal are to be removed prior to the commencement of other works.

Replacement trees will be required, two for everyone to be removed, to the satisfaction of the Director City Amenity.

On completion of planting of all trees, the developer must arrange for an installation inspection by the Council. Once all the trees have been planted to the satisfaction of the Council's Director City Amenity, the Council will issue a statement confirming satisfactory planting of all street trees.

All street trees must then be watered and maintained in a healthy

state by the developer for a period of two (2) years from the date of that statement.

Advice:

For further information regarding satisfaction of this condition, and to arrange an Installation Inspection by the Council, please liaise with the Council's Program Leader Arboriculture and Nursery by phoning 6238 2807.

A final plan showing the tree protection measures and the location of replacement plantings is to be submitted before building approval is sought or before works commence, whichever occurs sooner.

Once the plan has been approved, the Council will issue a condition endorsement (see general advice on how to obtain condition endorsement). It is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

Reason for condition

To ensure that the amenity of public open space is maintained and that works are undertaken in accordance with the *City of Hobart Street Tree Strategy 2017* and Australian Standard AS 4970 Protection of trees on development sites.

OPS 5

All trees to be retained in the vicinity of the development site and in particular the closest *Pinus radiata* pine tree, must be protected from damage during works. Canopies, trunks and root protection zones (as defined as the Tree Protection Zone in the *Australian Standard for Protection of trees on development sites AS4970*) are to be protected from damage, or compensation will be payable.

Before works commence, tree protection fencing must be installed around the trees to be retained. No vehicular access, excavation, placement of fill, storage of materials or soil disturbance is to occur within the fencing. There must be no pruning, lopping or damage to the tree (including its trunk and roots). Details of tree protection measures must be clearly notated on any plans submitted to the Council under the *Building Act 2016*.

A final plan showing the tree protection measures and the location of replacement plantings must be submitted before building approval is sought or before works commence, whichever occurs sooner.

Advice:

Once the plan has been approved the Council will issue a condition endorsement (see general advice on how to obtain condition endorsement). It is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

Reason for condition

To ensure that the amenity of public open space is maintained and that works are undertaken in accordance with the City of Hobart Street Tree Strategy 2017 and Australian Standard AS 4970 Protection of trees on development sites and that to ensure that development at a heritage place is undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.





WASTE DISPOSAL

It is recommended that the developer liaise with the Council's Cleansing and Solid Waste Unit regarding reducing, reusing and recycling materials associated with demolition on the site to minimise solid waste being directed to landfill.

Further information regarding waste disposal can also be found on the Council's [website](#).

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.

- Attachment A: PLN-21-693 - 62-66 CLARE STREET NEW TOWN
TAS 7008 -  Planning Committee or Delegated
Report ↓
- Attachment B: PLN-21-693 - 62-66 CLARE STREET NEW TOWN
TAS 7008 - CPC Agenda Documents ↓ 
- Attachment C: PLN-21-693 - 62-66 CLARE STREET NEW TOWN
TAS 7008 - Planning Referral Officer Open Space
and Recreation Report ↓ 
- Attachment D: PLN-21-693 - 62-66 CLARE STREET NEW TOWN
TAS 7008 - Planning Referral Officer Cultural
Heritage Report - ATTACHMENT C ↓ 

**APPLICATION UNDER HOBART INTERIM PLANNING SCHEME 2015**

Type of Report: Committee
Council: 24 January 2022
Expiry Date: 16 February 2022
Application No: PLN-21-693
Address: 62 - 66 CLARE STREET , NEW TOWN
Applicant: (Hobart City Council)
16 Elizabeth Street
Proposal: Partial Demolition, Alterations, and Extension
Representations: Five (5)
Performance criteria: Recreation Zone Standards, Historic Heritage Code

1. Executive Summary

- 1.1 Planning approval is sought for Partial Demolition, Alterations and Extension at 62-66 Clare Street, New Town.
- 1.2 More specifically the proposal includes:
- Demolition of the public toilet/grounds keepers building on the site,
 - Alterations to the existing changeroom building on the site, including the provision of new partitions within the toilets and removing a section of external wall to allow for the extension proposed at the south-eastern corner of the building. The existing scorers room at the centre of the northern side of the building would be incorporated into a new expanded kiosk.
 - Construction of extensions on the western, south-eastern, and eastern sides of the change room building. The extension on the western side would include expanded referees facilities. The extension on the south-eastern, and eastern sides would include two additional changerooms with ablution facilities, new public toilets, and a grounds keepers room.
- 1.3 The proposal relies on performance criteria to satisfy the following standards and codes:
- 1.3.1 Recreation Zone Standards - Passive Surveillance
- 1.3.2 Historic Heritage Code - Heritage Place

- 1.4 Four (4) representations regarding the proposal were received within the statutory advertising period between 29 November and 13 December 2021. One of the representations received was in support of the proposal while the remaining three representations were opposed. One (1) further representation against the development was received outside the advertising period, and this has been accepted as a representation.
- 1.5 The proposal is recommended for approval subject to conditions.
- 1.6 The final decision is delegated to the Council because the site is owned by the City of Hobart, and because four (4) representations have been received against the proposal.

2. Site Detail

- 2.1 The site is a Council owned recreational asset known as Clare Street Oval. The property has frontage to Clare Street on its north-eastern boundary, Harding Street on its north-western boundary, and Douglas Street on its southern boundary. Vehicular access to the site is via an entrance off Bedford Street on its eastern boundary. The majority of the area of the property is taken up by oval shaped playing surface but it also accommodates cricket nets and a storage shed to the west of the oval close to its frontage with Harding Street. A playground occupies the western corner of the property. The buildings that are the subject of the current application are within the south-eastern corner of the site.
- 2.2 The site is listed as a heritage place in Table E13.1 of the Planning Scheme's Historic Heritage Code.
- 2.3 The site is generally surrounded by established residential use and development, although Sacred Heart College is to the north, on the opposite side of Clare Street.



Figure 1: aerial view of site (outlined in blue) and surrounding area.



Figure 2: the toilets to the left and the changerooms and kiosk to the right.



Figure 3: the toilet block and trees near the boundary with Douglas Street.



Figure 4: the changerooms and kiosk



Figure 5: the scoreboard

3. Proposal

- 3.1 Planning approval is sought for Partial Demolition, Alterations and Extension at 62-66 Clare Street, New Town.

3.2 More specifically the proposal includes:

- Demolition of the public toilet/grounds keepers building on the site,
- Alterations to the existing changeroom building on the site, including the provision of new partitions within the toilets and removing a section of external wall to allow for the extension proposed at the south-eastern corner of the building. The existing scorers room at the centre of the northern side of the building would be incorporated into a new expanded kiosk.
- Construction of extensions on the western, south-eastern, and eastern sides of the change room building. The extension on the western side would include expanded referees facilities. The extension on the south-eastern, and eastern sides would include two additional changerooms with ablution facilities, new public toilets, and a grounds keepers room.

4. Background

4.1 Council issued a Planning Permit for a storage shed adjacent to the cricket nets on the site in November 2014 (PLN-14-01236-01).

4.2 The planning officer undertook a site visit on 11 January 2022.

5. Concerns raised by representors

5.1 Four (4) representations regarding the proposal were received within the statutory advertising period. One of the representations received was in support of the proposal while the remaining three representations were opposed. The representation in support of the proposal stated that:

"This development has our full support. It's good to see that, when finished, the soccer and cricket clubs will have up-to-date modern facilities".

One (1) representation was received outside the advertising period, and this representation has been accepted.

5.2 The following table outlines the concerns raised in the representations received. Those concerns which relate to a discretion invoked by the proposal are addressed in Section 6 of this report.

"There has been no consultation with residents in Douglas Street most effected by the proposed changes to the Amenities particularly as to :

- dramatic changes to the South Elevation involving privacy and aesthetics .
- reduced car parking spaces on game days.
- the new amenities involves removal of 2 Maple trees planted by Richard Weston (former HCC Supervisor) specifically to act as a barrier to unsightly Toilets and Original South Elevation .
- amenities upgrade will increase noise and lighting pollution to residents during winter training nights and play days.
- effect and sighting of tank installation and scrubery unknown".

1. Inappropriate development in its current location. More than doubling the change room capacity creating visual & noise & parking issues for residents.
2. New building footprint reduces the amount of parking area currently available as stated on application (the current carpark / Douglas St and Bedford St already is choked on game day & training days/evenings.)
3. Change room windows overlook residential homes, additional noise, and lighting issues.
4. No additional parking allocated or traffic management for increased capacity - players and spectators.
5. New Footprint encroaches too close to boundary and open space to Douglas St homes.
6. Raised roof to public toilet blocks outlook from Douglas St homes and is not a necessity.
7. The removal two Maple trees planted by council either side of the caged water main facing Douglas St.(not noted on plan)
8. Lack of appropriate fence/boundary screening to Douglas St residents.
9. Lack of any consultation with residents preplanning".

"from our perspective, it [the proposal] would definitely not enhance our experience but diminish it. We would be faced with a row of shower and toilet cubicle windows frowning down on us from a much shorter distance than is the case with the current building".

"It seems that the planners have thought much about the front of the building and not considered the view from the back. There is nothing friendly about a row of toilet/shower cubicle windows very close to the road staring at you".

"when sporting events occur on weekends, our street, quite narrow, is lined on both sides with cars so that often it is quite a delicate operation to get out of your own yard and this congestion continues into Bedford Street. How would this increase in traffic be managed?".
"Would there be extra lighting at night? Would the increased interest and facilities increase noise to a degree that is unacceptable? Could the whole thing be moved a little closer to the oval?".
"On the whole, with this plan, the streetscape would be diminished because of the construction's proximity to the fence and road, and the loss of greenery. And our experience would be diminished on a daily basis".
Concern about tree removal on the site.

6. Assessment

- 6.1 The *Hobart Interim Planning Scheme 2015* is a performance based planning scheme. To meet an applicable standard, a proposal must demonstrate compliance with either an acceptable solution or a performance criterion. Where a proposal complies with a standard by relying on one or more performance criteria, the Council may approve or refuse the proposal on that basis. The ability to approve or refuse the proposal relates only to the performance criteria relied on.
- 6.2 The site is located within the Recreation Zone of the *Hobart Interim Planning Scheme 2015*.
- 6.3 The existing use is sports and recreation which is a permitted use in the above zone. The proposed development would be associated with the existing use.
- 6.4 The proposal has been assessed against:
- 6.4.1 18.0 Recreation Zone
 - 6.4.2 E6.0 Parking and Access Code
 - 6.4.3 E7.0 Stormwater Management Code
 - 6.4.4 E13.0 Historic Heritage Code

6.5 The proposal relies on the following performance criteria to comply with the applicable standards:

6.5.1 18.0 Recreation Zone:

18.4.4 Passive Surveillance P1

6.5.2 E13.0 Historic Heritage Code:

E13.7.1 Demolition,

E13.7.2 Buildings and Works other than Demolition P1, P2, P3, and P4.

6.6 The relevant performance criteria are assessed below.

6.7 Passive Surveillance - Part D 18.4.4 P1

6.7.1 The acceptable solution at clause 18.4.4 A1 requires an alteration to an existing facade to provide windows and door openings at ground level which amount to no less than 40% of the surface area of the ground level facade.

6.7.2 The proposal includes alterations to an existing facade that would not provide windows and door openings at ground level which would amount to at least 40% of the surface area of the ground level facade.

6.7.3 The proposal does not comply with the acceptable solution and therefore relies upon assessment against the below performance criterion.

6.7.4 The performance criterion at clause 18.4.4 P1 provides as follows:

Buildings design must provide for passive surveillance of public spaces by satisfying all of the following:

(a) provide the main entrance or entrances to a building so that they are clearly visible from nearby buildings and public spaces;

(b) locate windows to adequately overlook the street and adjoining public spaces;

(c) incorporate shop front windows and doors for ground floor shops and offices, so that pedestrians can see into the building and vice versa;

(d) locate external lighting to illuminate any entrapment spaces around the building site;

(e) provide external lighting to illuminate car parking areas and pathways;

- (f) design and locate public access to provide high visibility for users and provide clear sight lines between the entrance and adjacent properties and public spaces;*
- (g) provide for sight lines to other buildings and public spaces.*

- 6.7.5 The various entrances to the building would continue to be visible from nearby public spaces such as the existing car park and the playing surface on the site. The proposed extension would include several windows which would overlook Douglas Street, including a row of highlight windows on the proposed southern elevation. Given the nature of the proposed building, it is not considered appropriate for it to incorporate shop front windows or doors. No additional external lighting is considered necessary as the facility is predominantly used in daylight hours and the proposal would not create entrapment spaces. The proposal would maintain sight lines between the building and the adjacent public spaces.
- 6.7.6 The proposal complies with the above performance criterion.
- 6.8 Historic Heritage Code - Part E 13.7.1 P1
- 6.8.1 There is no acceptable solution for clause E13.7.1 which applies where demolition is proposed on a site that is listed as a heritage place.
- 6.8.2 The proposal includes demolition and the site is listed as a heritage place in Table E13.1 of the Historic Heritage Code.
- 6.8.3 As there is no acceptable solution for the above clause the proposal therefore relies upon assessment against the below performance criterion.
- 6.8.4 The performance criterion at clause E13.7.1 provides as follows:
- Demolition must not result in the loss of significant fabric, form, items, outbuildings or landscape elements that contribute to the historic cultural heritage significance of the place unless all of the following are satisfied;*
- (a) there are, environmental, social, economic or safety reasons of greater value to the community than the historic cultural heritage values of the place;*
 - (b) there are no prudent and feasible alternatives;*
 - (c) important structural or façade elements that can feasibly be retained*

*and reused in a new structure, are to be retained;
(d) significant fabric is documented before demolition.*

- 6.8.5 The Council's Cultural Heritage Officer has advised that the proposed demolition includes removal of the public toilet/grounds keepers building and part of the external wall of the change room building. Neither building is considered to have cultural heritage significance as both are understood to date from the 1980s. Therefore, the proposed demolition would not result in the loss of significant fabric that contributes to the historic cultural heritage significance of the place.
- 6.8.6 The proposal complies with the above performance criterion.
- 6.9 Historic Heritage Code - Part E13.7.2 P1, P2, P3, and P4
- 6.9.1 There are no applicable acceptable solutions for clause E13.7.2 which applies where buildings and works other than demolition are proposed on a heritage place.
- 6.9.2 The proposal includes buildings and works other than demolition and the site is listed as a heritage place.
- 6.9.3 As there are no applicable acceptable solutions for the above clause the proposal therefore relies upon assessment against the below performance criteria.
- 6.9.4 The relevant performance criteria at clause E13.7.2 provide as follows:

P1

Development must not result in any of the following:

- (a) loss of historic cultural heritage significance to the place through incompatible design, including in height, scale, bulk, form, fenestration, siting, materials, colours and finishes;*
- (b) substantial diminution of the historic cultural heritage significance of the place through loss of significant streetscape elements including plants, trees, fences, walls, paths, outbuildings and other items that contribute to the significance of the place.*

P2

Development must be designed to be subservient and complementary

to the place through characteristics including:

- (a) scale and bulk, materials, built form and fenestration;*
- (b) setback from frontage;*
- (c) siting with respect to buildings, structures and listed elements;*
- (d) using less dominant materials and colours.*

P3

Materials, built form and fenestration must respond to the dominant heritage characteristics of the place, but any new fabric should be readily identifiable as such.

P4

Extensions to existing buildings must not detract from the historic cultural heritage significance of the place.

- 6.9.5 Council's Cultural Heritage Officer has assessed the proposal against the above performance criteria and provided the following comments:

The existing changing room facilities are considered to be relatively small and clearly read in form and materials as a dating from the mid 1980's. As such, whilst they adopt the form of a traditional sporting pavilion, architecturally they provide little to the cultural significance of the place other than clearly reflecting the principal use of the oval.

The proposed extensions would essentially retain the existing form of the pavilion, retain the building as a single storey structure whilst introducing some interesting additional architectural forms considered to compliment the original building. It is also noted that the new elements would be partially clad in battens of natural finish gum and bricks, adding much needed interest to the pallet of finish materials. As such, it is considered that the proposal would not lead to a loss of cultural significance through incompatible design, materials and finishes.

Importantly, the additional form and scale of the building would still remain in keeping with the sporting facilities of the Oval, retain the sense of openness associated with such a facility, and seek to retain the same level of screening from the road as the existing building and toilet block. Most importantly of all, the proposal would have no impact upon the health of the identified Radiata pines. As such, it is considered that the proposal would not lead to a substantial diminution of the historic cultural heritage

significance of the place through loss of significant streetscape elements including plants and trees. It is noted that works will be undertaken relatively close to the root system of one such pine. However a formal condition requiring that the tree be protected during construction and materials are stored within the root bowl area have been attached by the Council Arborist.

It is therefore considered that the proposal would not detract from the characteristics or setting of this Heritage Listed place and would thus comply with Clauses E.13.7.2 P1, P2, P3 & P4 of the HIPS.

6.9.6 The proposal complies with the above performance criteria.

7. Discussion

- 7.1 Planning approval is sought for Partial Demolition, Alterations and Extension at 62-66 Clare Street, New Town.
- 7.2 The application was advertised and received five (5) representations. The representations raised concerns including privacy, aesthetics, removal of trees, parking, and increase in noise and light pollution.
- 7.3 The proposal has been assessed against the relevant provisions of the planning scheme and is considered to perform well. The Senior Development Engineer was consulted regarding the loss of parking spaces. The oval is situated between Clare, Harding and Douglas Street all of which, in his view, would be able to absorb the deficiency in car parking as a result of the addition to the building. The overall small loss of car parking is not considered to increase any detriment to surrounding properties.
- 7.4 The proposal has been assessed by other Council officers, including the Council's Cultural Heritage Officer, Park Planner and Stormwater Services Engineer. The officers have raised no objection to the proposal, subject to conditions.
- 7.5 The proposal is recommended for approval.

8. Conclusion

- 8.1 The proposed Partial Demolition, Alterations and Extension at 62-66 Clare Street, New Town satisfies the relevant provisions of the *Hobart Interim Planning Scheme 2015*, and as such is recommended for approval.

9. Recommendations

That: Pursuant to the *Hobart Interim Planning Scheme 2015*, the Council approve the application for Partial Demolition, Alterations and Extension at 62-66 Clare Street, New Town for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-21-693 - 62-66 CLARE STREET NEW TOWN TAS 7008 - Final Planning Documents except where modified below.

Reason for condition

To clarify the scope of the permit.

ENG sw1

All stormwater from the proposed development (including but not limited to: roofed areas, ag drains, retaining wall ag drains and impervious surfaces such as driveways and paved areas) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Advice: Under section 23 of the Urban Drainage Act 2013 it is an offence for a property owner to direct stormwater onto a neighbouring property.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

SW 9

Prior to occupancy or the commencement of the approved use (whichever occurs first), stormwater stormwater discharges from the development must be installed.

A stormwater management report and design must be submitted and approved prior to the issue of any approval under the *Building Act 2016* or the commencement of work on the site (whichever occurs first). The stormwater management report and design must be prepared by a suitably qualified engineer and must:

1. Include detailed design and supporting calculations of the detention tank showing:
 1. detention tank sizing such that there is no increase in flows from the developed site up to 5% AEP event and no worsening of flooding;
 2. the layout, the inlet and outlet (including long section), outlet size, overflow mechanism and invert level;
 3. the discharge rates and emptying times; and
 4. all assumptions must be clearly stated;
2. Include a supporting maintenance plan, which specifies the required maintenance measures to check and ensure the ongoing effective operation of all systems, such as: inspection frequency; cleanout procedures; descriptions and diagrams of how the installed systems operate; details of the life of assets and replacement requirements.

All work required by this condition must be undertaken and maintained in accordance with the approved stormwater management report and design.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or
2. Be repaired and reinstated by the owner to the satisfaction of the Council.

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway

crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENV 1

Sediment and erosion control measures sufficient to prevent sediment from leaving the site must be installed prior to any disturbance of the site, and maintained until all areas of disturbance have been stabilized or re-vegetated.

Advice: For further guidance in preparing a Soil and Water Management Plan – in accordance with Fact sheet 3 Derwent Estuary Program click [here](#).

Reason for condition

To avoid the sedimentation of roads, drains, natural watercourses, Council land that could be caused by erosion and runoff from the development, and to comply with relevant State legislation.

HER 18

The Radiata Pine trees must be protected throughout excavation and post construction.

A report must be submitted for approval as a Condition Endorsement prior to the commencement of work. The report must:

1. **Be prepared by a suitable qualified person; and**
2. **Show all tree protection zones and relevant measures specified under Section 3 Determining the Protection Zones of the Selected Trees, Section 4 Tree Protection Measures and Section 5 Monitoring and Certification of AS4970-2009 Protection of trees on development sites, around the Radiata Pine.**

All work required by this condition must be undertaken in accordance with the approved report.

Advice: This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that development at a heritage place is undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance.

OPS 3

The four Pittosporum trees identified for removal are to be removed prior to the commencement of other works.

Replacement trees will be required, two for every one to be removed, to the satisfaction of the Director City Amenity.

On completion of planting of all trees, the developer must arrange for an installation inspection by the Council. Once all the trees have been planted to the satisfaction of the Council's Director City Amenity, the Council will issue a statement confirming satisfactory planting of all street trees.

All street trees must then be watered and maintained in a healthy state by the developer for a period of two (2) years from the date of that statement.

Advice: For further information regarding satisfaction of this condition, and to arrange an Installation Inspection by the Council, please liaise with the Council's Program Leader Arboriculture and Nursery by phoning 6238 2807.

A final plan showing the tree protection measures and the location of replacement plantings is to be submitted before building approval is sought or before works commence, whichever occurs sooner.

Once the plan has been approved, the Council will issue a condition endorsement (see general advice on how to obtain condition endorsement). It is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

Reason for condition

To ensure that the amenity of public open space is maintained and that works are undertaken in accordance with the City of Hobart Street Tree Strategy 2017 and Australian Standard AS 4970 Protection of trees on development sites.

OPS 5

All trees to be retained in the vicinity of the development site and in particular the closest *Pinus radiata* pine tree, must be protected from damage during works. Canopies, trunks and root protection zones (as defined as the Tree Protection Zone in the *Australian Standard for Protection of trees on development sites AS4970*) are to be protected from damage, or compensation will be payable.

Before works commence, tree protection fencing must be installed around the trees to be retained. No vehicular access, excavation, placement of fill, storage of materials or soil disturbance is to occur within the fencing. There must be no pruning, lopping or damage to the tree (including its trunk and roots). Details of tree protection measures must be clearly notated on any plans submitted to the Council under the *Building Act 2016*.

A final plan showing the tree protection measures and the location of replacement plantings must be submitted before building approval is sought or before works commence, whichever occurs sooner.

Advice: Once the plan has been approved the Council will issue a condition endorsement (see general advice on how to obtain condition endorsement). It is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

Reason for condition

To ensure that the amenity of public open space is maintained and that works are undertaken in accordance with the City of Hobart Street Tree Strategy 2017 and Australian Standard AS 4970 Protection of trees on development sites and that to ensure that development at a heritage place is undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not

exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

WASTE DISPOSAL

It is recommended that the developer liaise with the Council's Cleansing and Solid Waste Unit regarding reducing, reusing and recycling materials associated with demolition on the site to minimise solid waste being directed to landfill.

Further information regarding waste disposal can also be found on the Council's [website](#).

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.



(Adam Smee)

Development Appraisal Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Karen Abey)

Manager Development Appraisal

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Date of Report: **Date Missing**

Attachment(s):

Attachment B - CPC Agenda Documents

Attachment C - Planning Referral Officer Report

PLN-21-693 - 62 - 66 CLARE STREET

Application Information

▼ Application Details PLN-21-693 Partial Demolition, Alterations, and Extension 
Submitted on: 14/10/2021
Accepted as Valid on: 14/10/2021
Target Time Frame: 42 Days.
Elapsed Time: 41 Days (Stopped: 41 Days) = 0 Days Expiry date: 05/01/2022
Officer: Adam Smee

Have you obtained pre application advice?

☐ No

If YES please provide the pre application advice number eg PAE-17-xx

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. If you are not the owner of the property you MUST include signed confirmation from the owner that they are aware of this application. *

☐ No

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the number of signs under Other Details below. *

☐ No

If this application is related to an enforcement action please enter Enforcement Number

Details

What is the current approved use of the land / building(s)? *

Sports Facilities & public toilets

Please provide a full description of the proposed use or development (i.e. demolition and new dwelling, swimming pool and garage) *

Partial demolition & additions to existing sports facilities & public toilets

Estimated cost of development *

990000.00

Existing floor area (m2)

157.00

Proposed floor area (m2)

199.50

Site area (m2)

20325

Carparking on Site

Total parking spaces

30

Existing parking spaces

30

N/A

☒ Other (no selection chosen)

Other Details

Does the application include signage? *

No

How many signs, please enter 0 if there are none involved in this application? *

0

Tasmania Heritage Register

Is this property on the Tasmanian Heritage Register?

No

Edit

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
157662	1000
EDITION	DATE OF ISSUE
3	20-May-2010

SEARCH DATE : 16-Sep-2021
SEARCH TIME : 01.59 PM

DESCRIPTION OF LAND

City of HOBART
Lot 1000 on Plan 157662 (Section 27A of the Land Titles Act.)
Derivation : Whole of Lot 1000 on Plan 157662 Gtd. to The Crown

SCHEDULE 1

C947383 TRANSFER to HOBART CITY COUNCIL Registered
20-May-2010 at 12.01 PM

SCHEDULE 2

C946593 Land is limited in depth to 15 metres, excludes
minerals and is subject to reservations relating to
drains sewers and waterways in favour of the Crown
C947383 FENCING PROVISION in Transfer
C947383 REVERSIONARY CONDITIONS set forth in Transfer

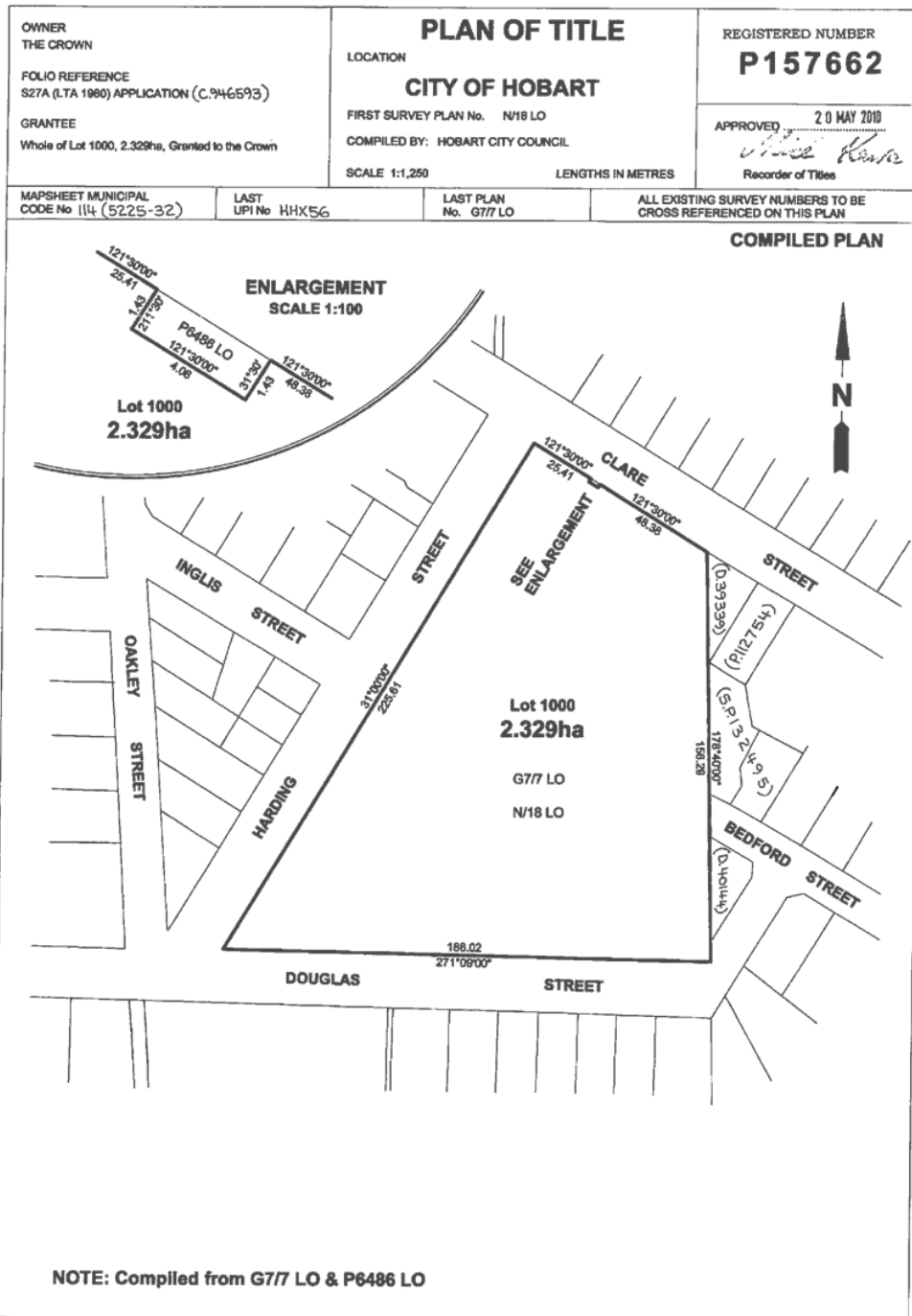
UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

the **List**...**FOLIO PLAN**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980





11/15/2021

STORMWATER REPORT

62-66 CLARE STREET, NEW TOWN 7008

PLN-21-693

Prepared by: [Imran Khan](#)
DESIGN ENGINEER, CITY OF HOBART

Table of Contents

INTRODUCTION..... 2

STORMWATER CALCULATION..... 2

DETENTION TANK MAINTENANCE REQUIREMENT 3

Conclusion..... 3

INTRODUCTION

The following report outlines the supporting calculation to address stormwater management condition Sw6 of the Hobart City Council planning scheme 2015

- a) Accommodate a storm with an ARI of 20 years when the land serviced by the system is fully developed
- b) Stormwater runoff will be no greater than pre-existing runoff or any increase can be accommodated within the existing or upgraded public stormwater infrastructure.

STORMWATER CALCULATION

Pre development

Pre-development impervious area (roofs) A= 214 m²

Coefficient of Runoff C = 0.9

5-minutes duration-5% AEP I = 85.9 mm/h

Post-development

Post-development impervious area (roofs) A= 409.5 m²

Coefficient of Runoff C = 0.9

5-minutes duration-5% AEP I = 85.9 mm/h

Calculations have been based on the Rational Method for stormwater run-off:

$$Q = \frac{C \cdot I \cdot A}{3600}$$

Where:

Q = Design Flow Rate [L/s]

C = Runoff Coefficient

I = Rainfall Intensity [mm/hr] (5 minute - 5% AEP storm)

A = Sum of areas [m²]

$$\text{Pre-development design flow rate } Q_{\text{pre}} = \frac{0.9 \cdot 85.9 \cdot 214}{3600} = 4.5 \text{ L/s}$$

$$\text{Post-development design flow rate } Q_{\text{post}} = \frac{1 \cdot 85.9 \cdot 409.5}{3600} = 8.80 \text{ L/s}$$

Difference between Pre & Post-development design flow rate = 8.80—4.5= 4.3 L/s

As shown above the post development flow Q_{post} is 4.3 L/s greater than the Q_{pre}. Therefore on-site detention (OSD) is required for this development.

Minimum size detention tank requirement = $4.3 \times 5 \times 60 = 1290 \text{ L}$.

The proposed 2200 Litres detention tank with a 25mm diameter orifice is more than enough for the proposed development.

Orifice flow rate $Q \text{ L/s} = C_d A_o \sqrt{2gH}$

Discharge Co-efficient $C_d = 0.51$ (Borda type orifice)

Area of orifice $A_o = \frac{\pi D^2}{4} = 0.000491 \text{ m}^2$

Height above centreline of orifice to liquid surface $H = 0.6 \text{ m}$

Orifice flow rate $Q = 0.00085 \text{ m}^3/\text{s} = 0.8 \text{ L/s}$

DETENTION TANK MAINTENANCE REQUIREMENT

Maintenance Action	Frequency	Procedure
Inspect & Remove any blockage of orifice	Six monthly	Remove the cover on tank to inspect orifice
Check orifice diameter correct and sharp edge	Five yearly	Compare orifice diameter to approved design & ensure orifice is not damaged
Inspect overflow and remove any blockage	Six monthly	Ensure overflow outlet is clear of blockage
Visual inspection inside the tank to check sludge zone does not exceed orifice height	Once in a year	Use flush tap inside detention tank to clean any sludge deposit inside the tank.

Conclusion

Based on calculations, the 2200L round corrugated rainwater above ground tank (Diameter 1.6m, Inlet Height 1.6m) with a 25mm orifice is more than adequate to retain discharge flow rates up to 5% average exceedance (5 minutes, 1 in 20 years rain events). The Detention tank will need to be installed according to manufacturers' recommendations and be fitted with a minimum orifice of 25mm in diameter. A higher-level overflow outlet minimum DN75 is also required to be installed to cater for larger duration rain events.



Enquiries to: City Planning
Phone: (03) 6238 2715
Email: coh@hobartcity.com.au

24 November 2021

(City Of Hobart)
16 Elizabeth Street
HOBART TAS 7000

<mailto:pigdenb@hobartcity.com.au>

Dear Sir/Madam

**62 - 66 CLARE STREET, NEW TOWN - WORKS IN COUNCIL RESERVE NOTICE OF
LAND OWNER CONSENT TO LODGE A PLANNING APPLICATION - GMC-21-74**

Site Address:

62-66 Clare Street, New Town

Description of Proposal:

Partial Demolition, Alterations and Extension

Applicant Name:

City of Hobart
Brian Pigden

PLN (if applicable):

PLN-21-693

I write to advise that pursuant to Section 52 of the *Land Use Planning and Approvals Act 1993*, I grant my consent on behalf of the Hobart City Council as the owner/administrator of the above land for you to make application to the City for a planning permit for the development described above and as per the attached documents. I granted consent pursuant to delegation, a copy of which is enclosed.


Please note that the granting of the consent is only for the making of the application and in no way should such consent be seen as prejudicing any decision the Council is required to make as the statutory planning authority.

Hobart Town Hall
50 Macquarie Street
Hobart TAS 7000

Hobart Council Centre
16 Elizabeth Street
Hobart TAS 7000

City of Hobart
GPO Box 503
Hobart TAS 7001

T 03 6238 2711
F 03 6234 7109
E coh@hobartcity.com.au
W hobartcity.com.au

 CityofHobartOfficial
ABN 39 055 343 428
Hobart City Council

This consent does not constitute an approval to undertake any works and does not authorise the owner, developer or their agents any right to enter or conduct works on any Council managed land whether subject to this consent or not.

If planning approval is granted by the planning authority, you will be required to seek approvals and permits from the City as both landlord, land manager, or under other statutory powers (such as other legislation or City By-Laws) that are not granted with the issue of a planning permit under a planning scheme. This includes the requirement for you to reapply for a permit to occupy a public space under the City's Public Spaces By-law if the proposal relates to such an area.

Accordingly, I encourage you to continue to engage with the City about these potential requirements.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'John Fisher', with a stylized flourish at the end.

(John Fisher)
ACTING DIRECTOR CITY AMENITY

Relevant documents/plans:

Plans by City of Hobart A01 - A07



City of Hobart

INSTRUMENT OF DELEGATION

General Delegation

Director City Amenity

I, Kelly Grigsby, Chief Executive Officer, being the General Manager of the Hobart City Council as appointed by Council pursuant to section 61 of the *Local Government Act 1993* ("the Act") hereby delegate pursuant to Section 64 of the Act, the following powers and functions to the **Director City Amenity**, or to such persons who may be acting in that position:

1. to sign an application; and
2. to provide written permission to make an application;

pursuant to section 52(1B) of the *Land Use Planning and Approvals Act 1993*,
EXCEPT where an application is recommended for refusal.

Dated this 20 day of August 2021

(Kelly Grigsby)
CHIEF EXECUTIVE OFFICER

Being the General Manager as appointed by the Council pursuant to Section 61 of the Local Government Act 1993 (tas)

Clare Street Oval

Amenities upgrade

Bedford Street, New Town

for:

City of Hobart
City Amenity Division

by:

City of Hobart
Design Services Unit

BUILDING DETAILS:

SITE AREA:	2.325 ha
EXISTING BUILDING FLOOR AREA:	157m ²
EXISTING VERANDAH FLOOR AREA:	57 m ²
PUBLIC TOILET DEMOLITION:	58.5 m ²
AREA OF BUILDING ADDITIONS:	199.5 m ²
AREA OF CONCOURSE, RAMPS & VERANDAH ADDITIONS	72m ²

DRAWING LIST:

- A01 E - COVER PAGE / LOCATION PLAN
- A02 E - EXISTING FLOOR PLAN / IMAGES
- A03 E - SITE PLAN / SCHEMATIC DRAINAGE PLAN
- A04 E - PROPOSED FLOOR PLAN
- A05 E - PROPOSED ELEVATIONS
- A06 E - SCHEMATIC DRAINAGE PLAN
- A07 E - PROPOSED ROOF PLAN / DETENTION TANK DETAIL

Approved - General Manager Consent Only
[GMC-21-74]
24/11/2021

EXISTING PUBLIC TOILETS / GROUNDSMAN SHED TO BE DEMOLISHED (58.5 sq.m)

EXISTING SW & SEWER MAINS

EXISTING TREES TO BE REMOVED

PROPOSED 2,000 LITRE WATER DETENTION TANK (under ground)

EXISTING CHANGEROOMS (157 sq.m)

PROPOSED KICK ADDITIONS (15 sq.m under existing roof)

PROPOSED REFEREE ADDITION (18.5 sq.m)

EXISTING RADIATA PINE TREES

6 NO NEW "CALLISTEMON" TREES TO EXISTING LAWN AREA ADJACENT ROAD FRONTAGE

EXISTING CARPARK

PROPERTY BOUNDARY

DOUGLAS STREET

BEDFORD STREET

CLARE STREET

HARDING STREET

EXISTING PUBLIC TOILETS / GROUNDSMAN SHED TO BE DEMOLISHED

EXISTING CHANGEROOM BUILDING

EXISTING VERANDAH

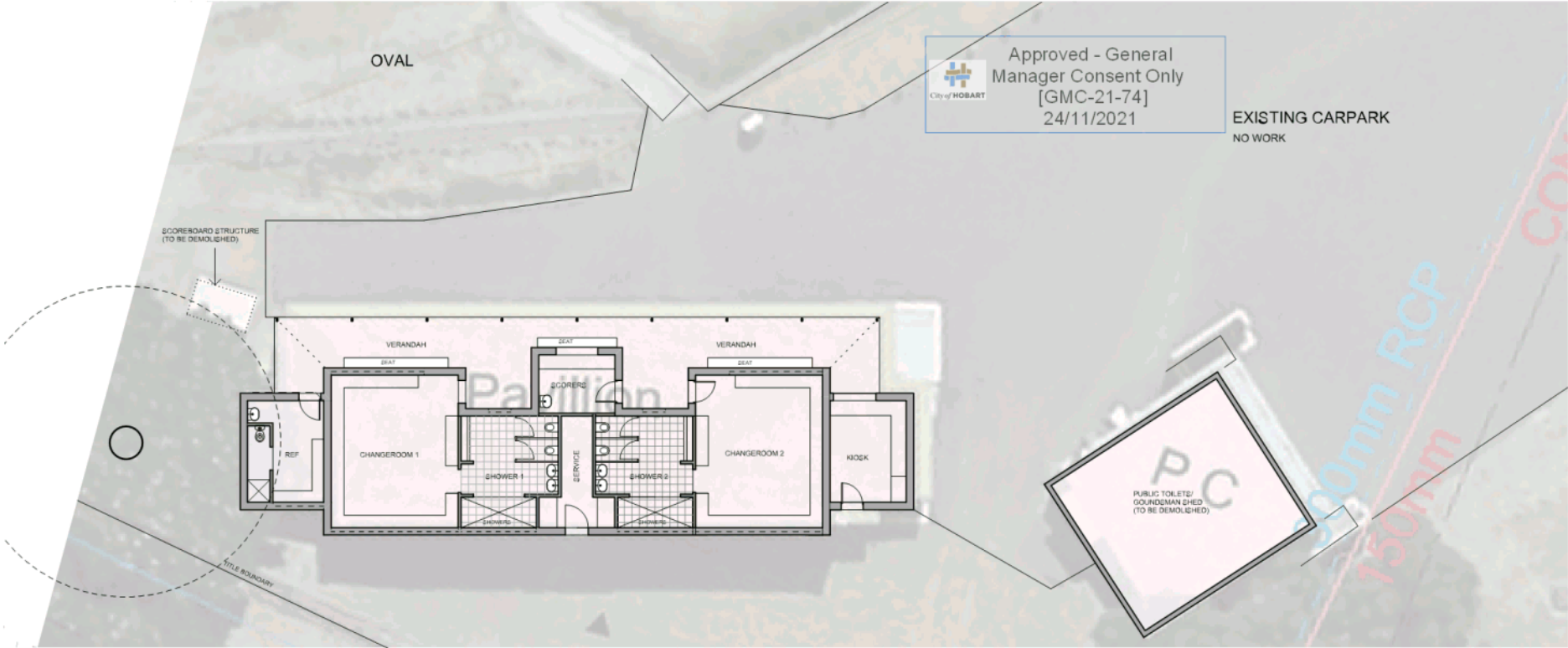
No.	Revision Description	Date

HOBART COUNCIL CENTRE
19 ELIZABETH STREET
GPO BOX 552
T: (03) 6224 2711
F: (03) 6224 3767
E: hobart@hobartcity.com.au
www.hobartcity.com.au

Clare Street Oval – Amenities Upgrade

DEVELOPMENT APPLICATION

Project Description		Project Number	
Clare Street Oval - Amenities Upgrade		20-0022	
Drawing Title		Drawn By	
Cover Page / Location Plan		JH	
Client		Date	
City Amenity		Nov 2021	
Drawn By	Checked By	Approved By	Project Manager
NA	A		A01 F



No.	Revision Description	Date

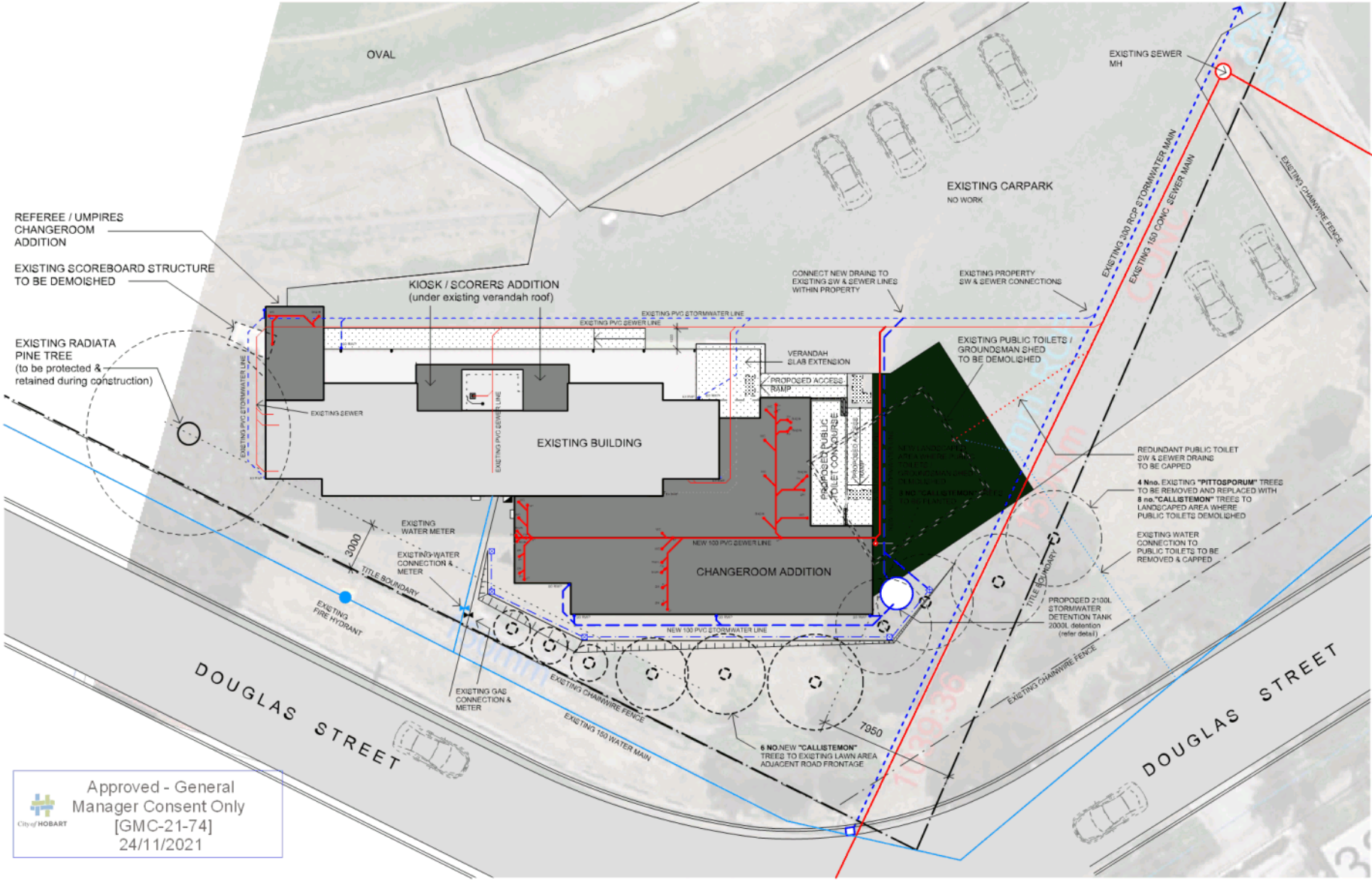


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www.hobartcity.com.au

Clare Street Oval – Amenities Upgrade
DEVELOPMENT APPLICATION



Project Description				Project Number	
Clare Street Oval - Amenities Upgrade				20-0023	
Drawing Title		Scale	Ratio	Drawn	By
Existing floor plan / Images		Scale	Ratio	Drawn	By
Client		Date	Version	Drawn	By
City Amenity		Nov 2021	A	A02 F	-
Scale		1:150	A		



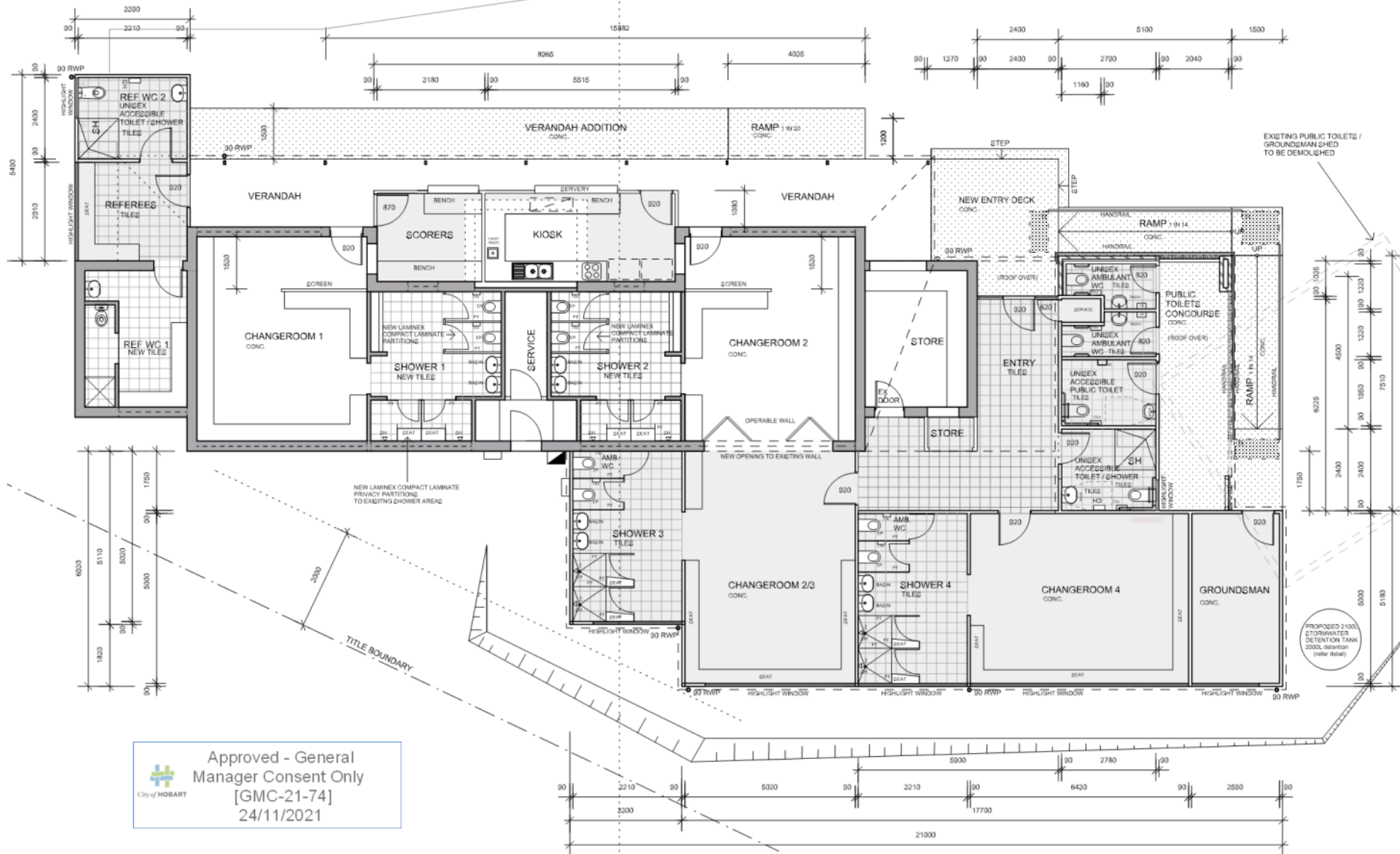
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Clare Street Oval – Amenities Upgrade
DEVELOPMENT APPLICATION



Project Description		Clare Street Oval - Amenities Upgrade		HSE Number	
Drawing Title		Site / Schematic Drainage Plan		20-0023	
Client	City Amenity	Drawn	Nov 2021	Scale	A03 F
Drawn	1:200	Checked			



No.	Revision Description	Date



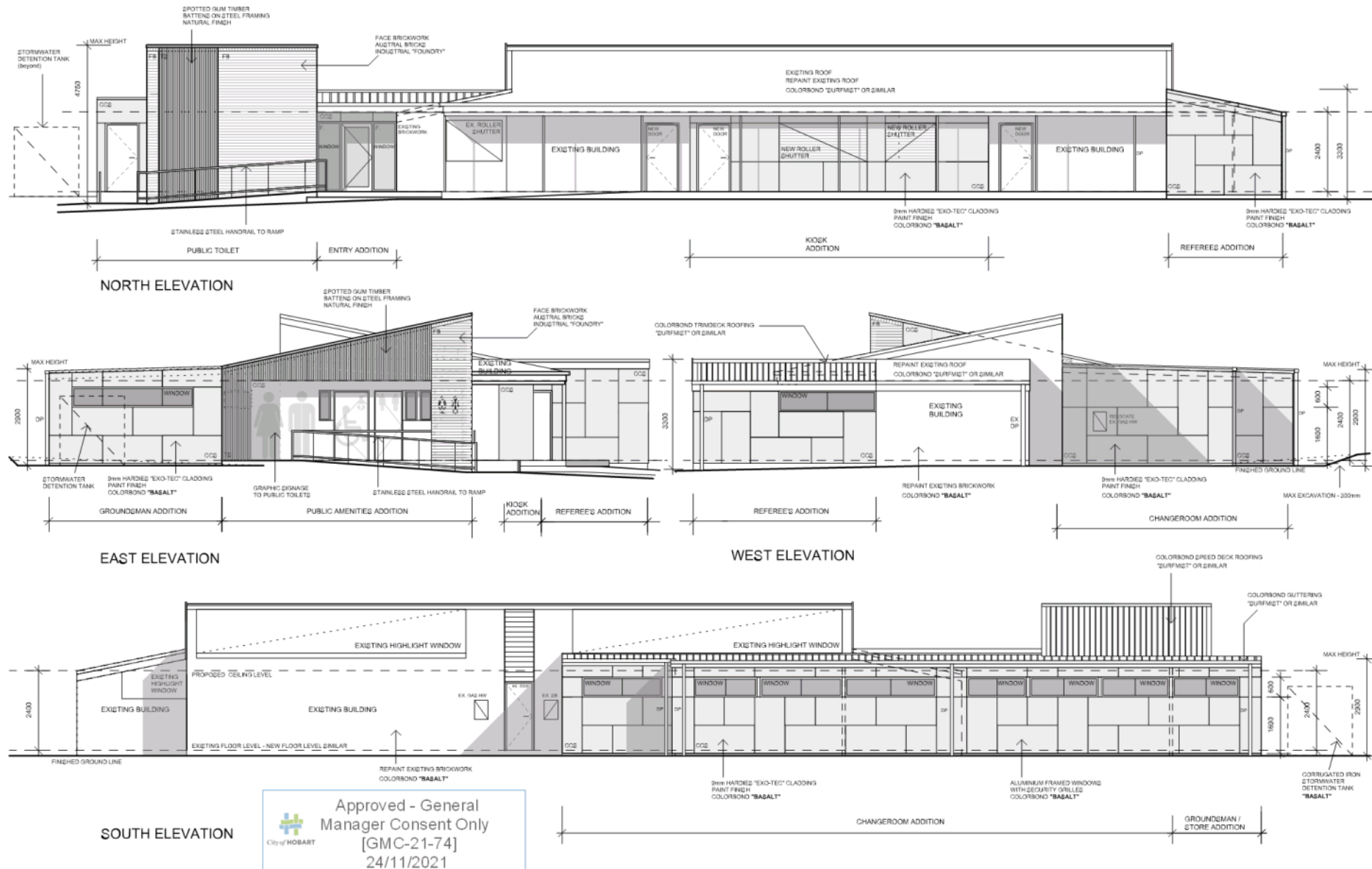
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Clare Street Oval – Amenities Upgrade

DEVELOPMENT APPLICATION



Project Description	Clare Street Oval - Amenities Upgrade	Project Number	20-0023
Drawing Title	Proposed Floor Plan	Drawn By	
Client	City Amenity	Check By	
Date	Nov 2021	Scale	1:100
			A04 F



No.	Revision Description	Date



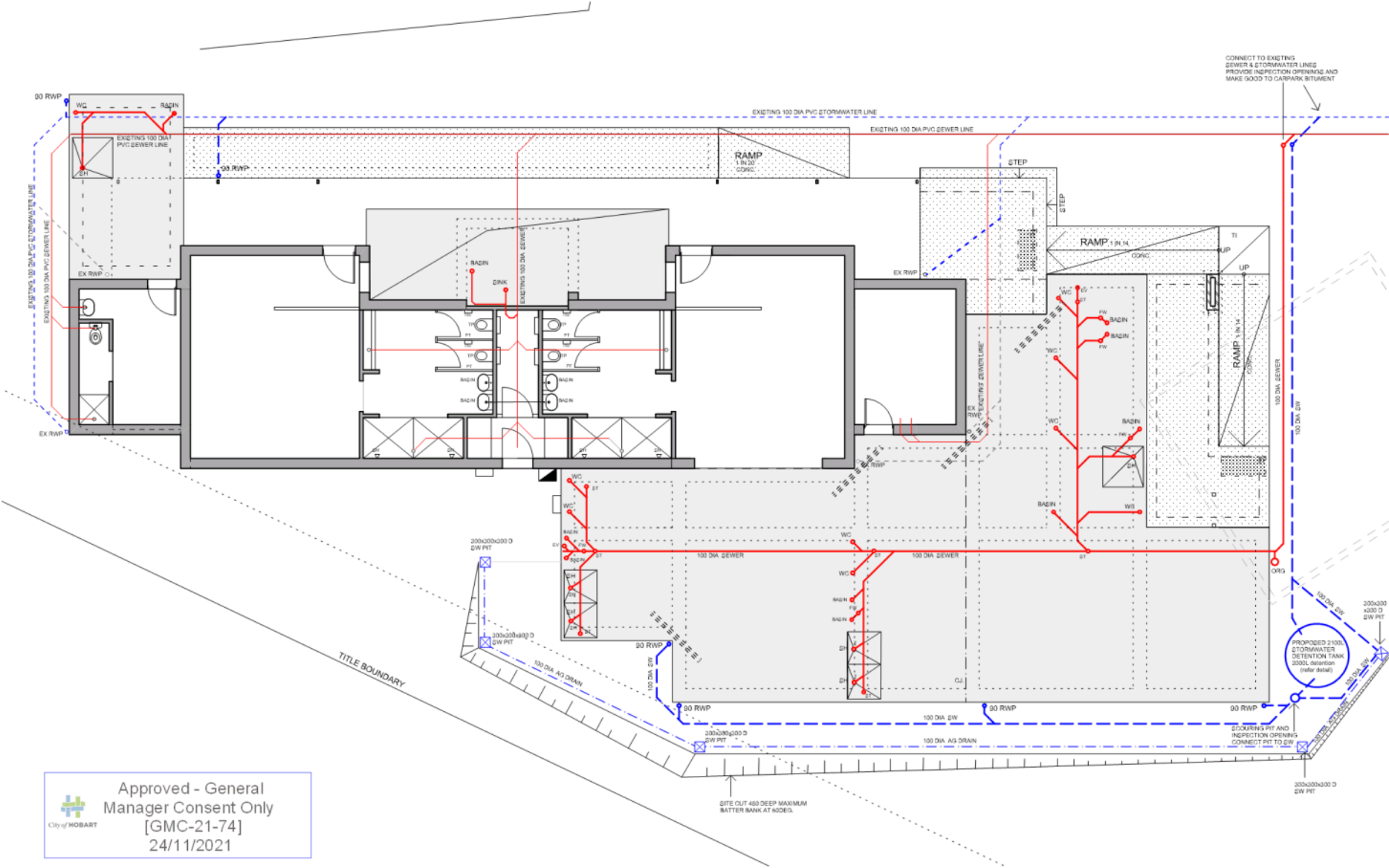
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Clare Street Oval – Amenities Upgrade

DEVELOPMENT APPLICATION



Project Description	Clare Street Oval - Amenities Upgrade	Project Number	20-0023
Drawing Title	Proposed Elevations	Drawn	SP
Client	City Amenity	Checked	SP
Date	Nov 2021	Scale	1:100



Approved - General
Manager Consent Only
[GMC-21-74]
24/11/2021

No.	Revision Description	Date



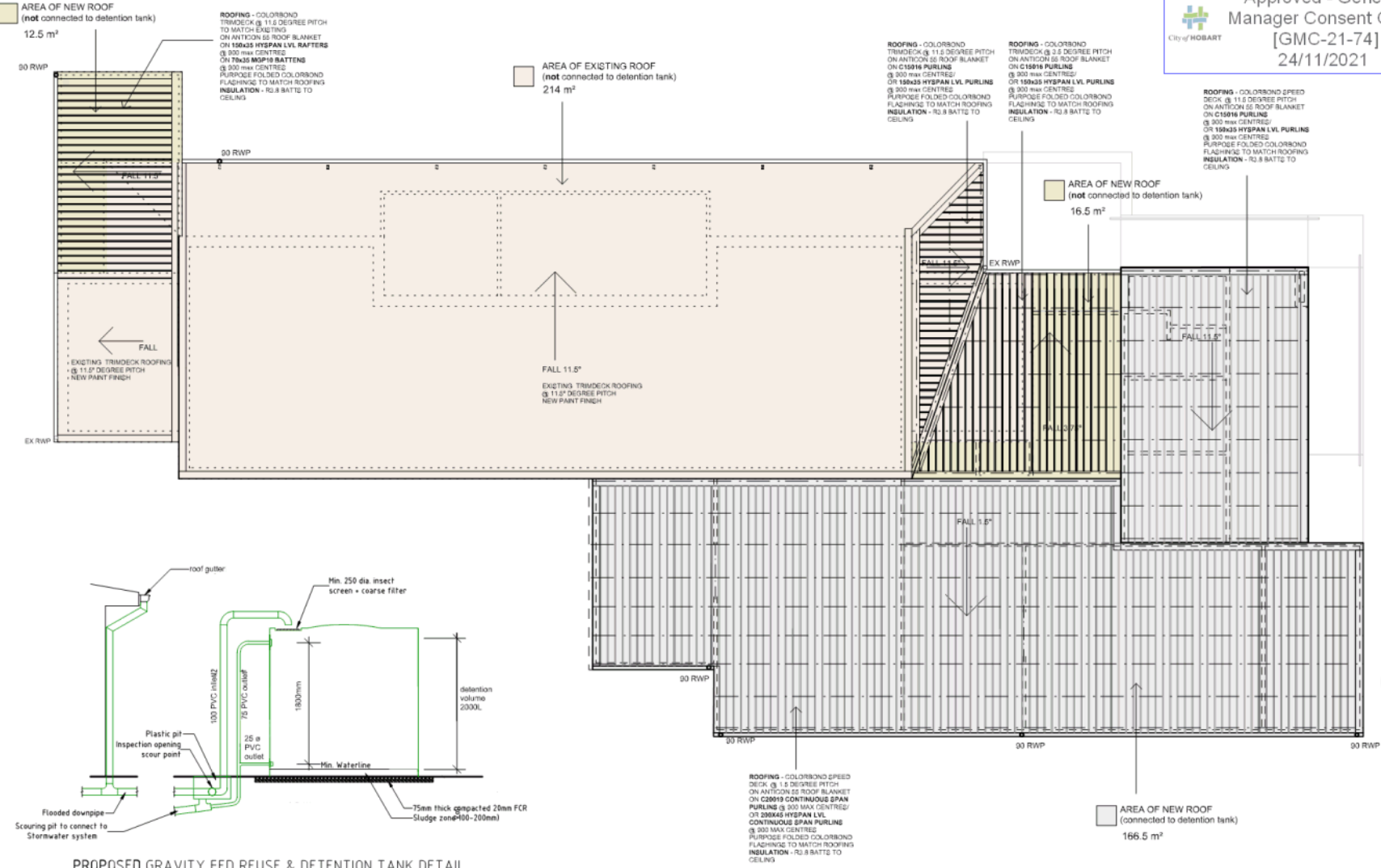
HOBART COUNCIL CENTRE
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www.hobartcity.com.au

Clare Street Oval – Amenities Upgrade
DEVELOPMENT APPLICATION



Project Description		File Number	
Clare Street Oval - Amenities Upgrade		20-0023	
Drawing Title	Author	Drawn	Scale
Schematic Drainage Plan	KB	KB	1:100
Drawn	Nov 2021	Drawn	Nov 2021
City Amenity	1:100	City Amenity	A06 F

Approved - General
Manager Consent Only
[GMC-21-74]
24/11/2021



No.	Revision Description	Date



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www.hobartcity.com.au

Clare Street Oval – Amenities Upgrade

DEVELOPMENT APPLICATION



Project Registration	Clare Street Oval - Amenities Upgrade	Project Number	20-0023
Drawing Title	Proposed Roof Plan/ Detention tank detail	Sheet Number	20-0023
Client	City Amenity	Scale	1:100
Date	Nov 2021	Author	A07F

Clare Street Oval

Amenities upgrade

Bedford Street, New Town

for:

City of Hobart
City Amenity Division

by:

City of Hobart
Design Services Unit

BUILDING DETAILS:

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STREET

STREET

CLARE STREET

HARDING STREET

146 m²

EXISTING CARPARK

EXISTING PUBLIC TOILETS / GROUNDSEMAN SHED TO BE DEMOLISHED 58.5 sq. m

EXISTING SW & SEWER MAINS

EXISTING TREES TO BE REMOVED

PROPOSED 2000 LITRE WATER DETENTION TANK (under lawn)

PROPOSED KIOSK ADDITIONS 15 sq. m (under existing roof)

PROPOSED REFEREE ADDITION 18.5 sq. m

EXISTING RADIATA PINE TREES

EXISTING CHANGEROOMS 157 sq. m

PROPERTY BOUNDARY

DOUGLAS STREET

NO NEW "CALLISTEMON" TREES TO EXISTING LAWN AREA ADJACENT ROAD FRONTAGE

EXISTING PUBLIC TOILETS / GROUNDSEMAN SHED TO BE DEMOLISHED

EXISTING CHANGEROOM BUILDING

EXISTING VERANDAH

No.	Revision Description	Date

City of HOBART

HOBART COUNCIL CENTRE
18 ELIZABETH STREET
GPO BOX 552
T: (03) 6224 2711
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E: hobart@hobartcity.com.au
www.hobartcity.com.au

Clare Street Oval – Amenities Upgrade

DEVELOPMENT APPLICATION

Project Description
Clare Street Oval - Amenities Upgrade
Drawing Title
Cover Page / Location Plan
Client
City Amenity

DATE	APPROVED	DATE	APPROVED
Nov 2021			
NA			

REV	DESCRIPTION	DATE	BY

Project Number
20-0322

Drawn By
A01 F



No.	Revision Description	Date

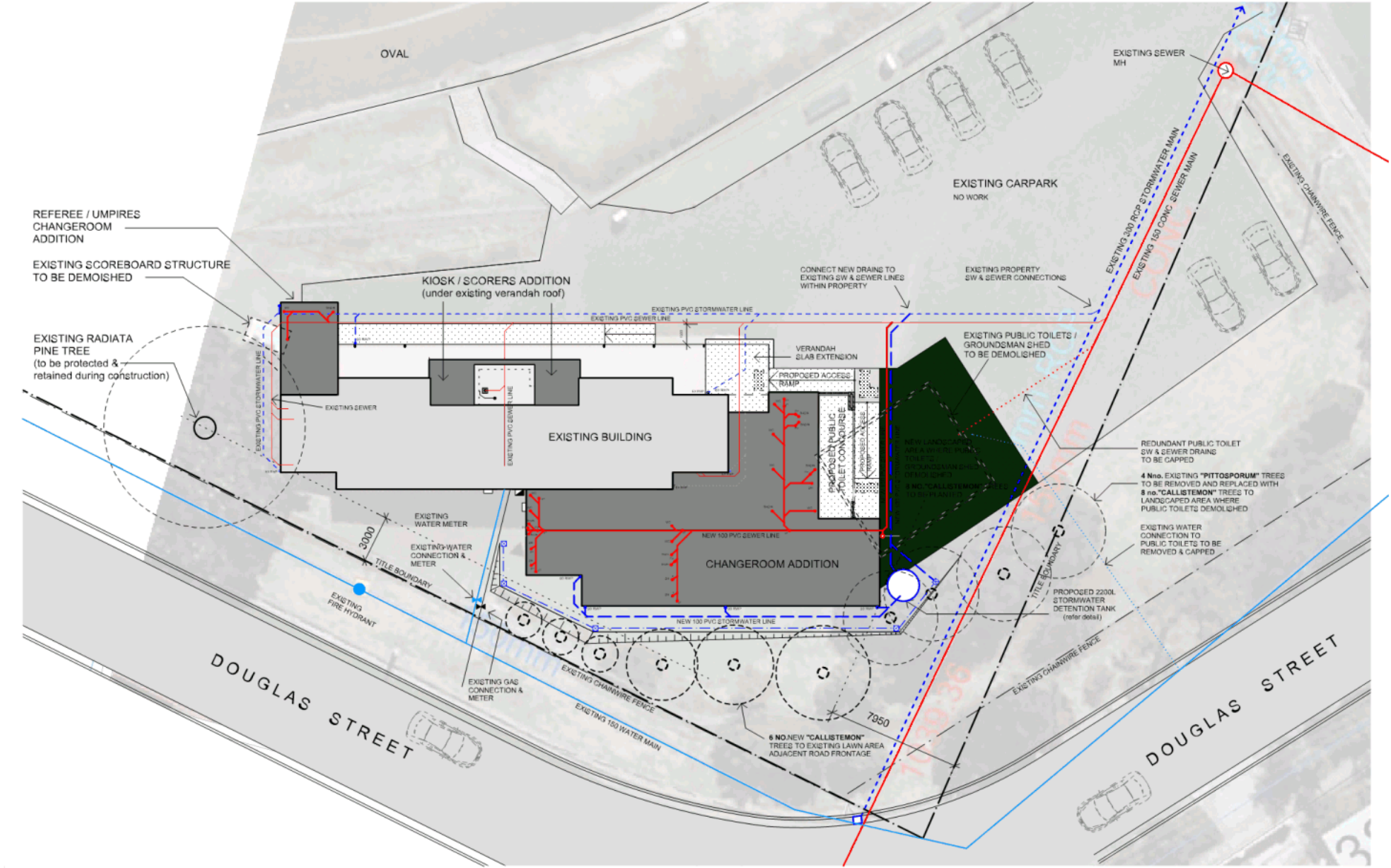


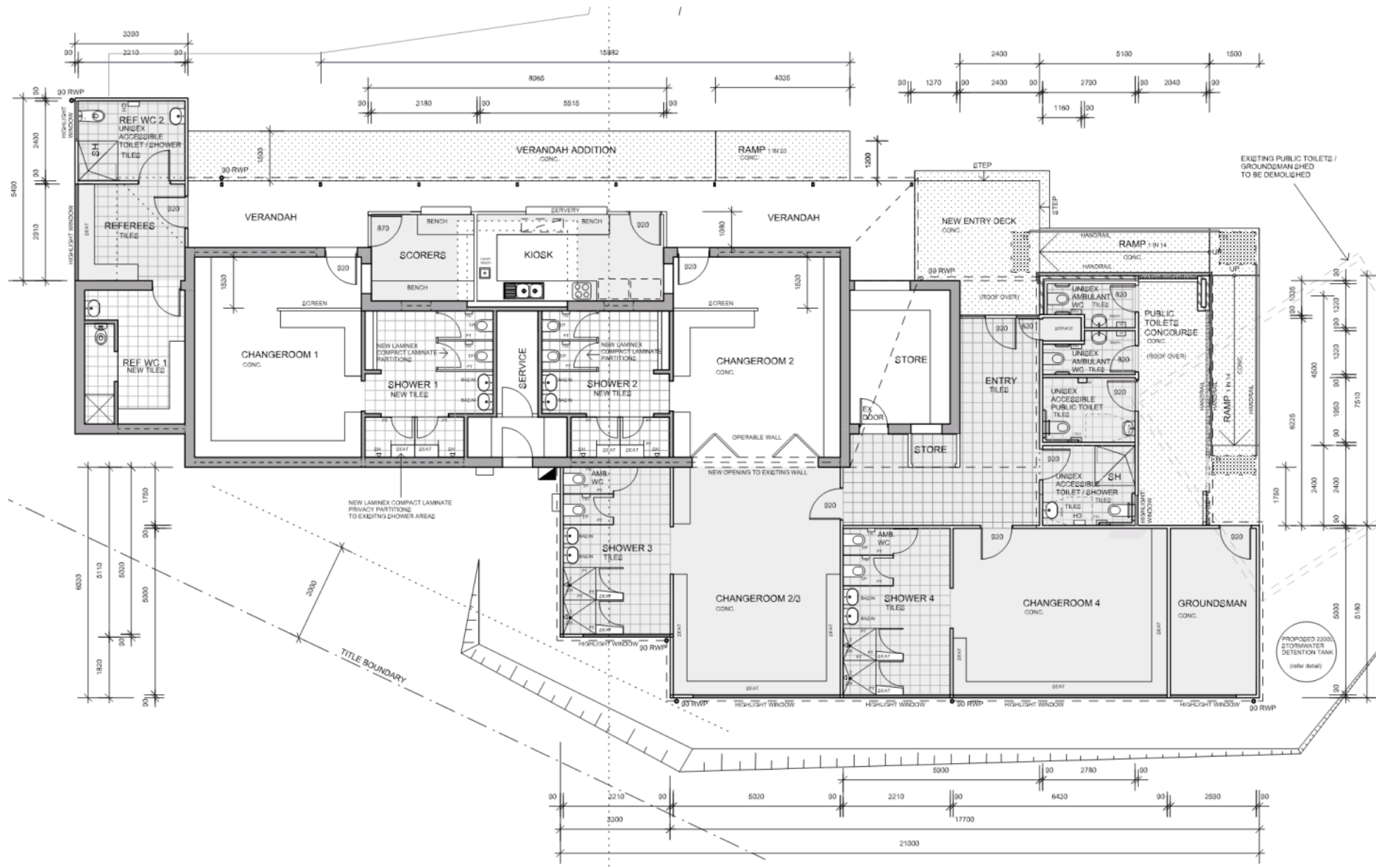
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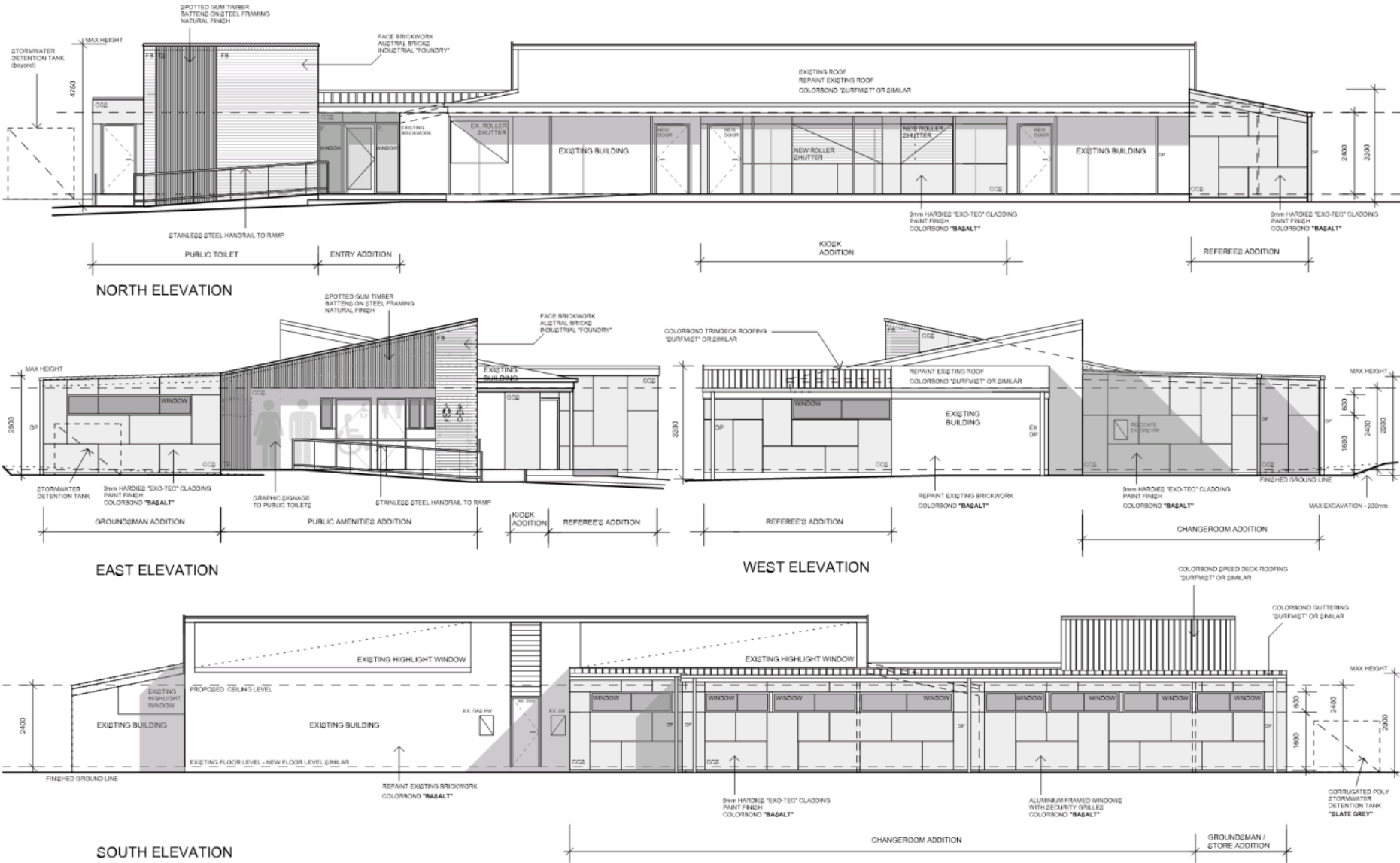
Clare Street Oval – Amenities Upgrade
DEVELOPMENT APPLICATION



Project Description		Project Number	
Clare Street Oval - Amenities Upgrade		20-0023	
Drawing Title	Client	Scale	Sheet
Existing floor plan / Images	City Amenity	1:150	A02 F







No.	Revision Description	Date

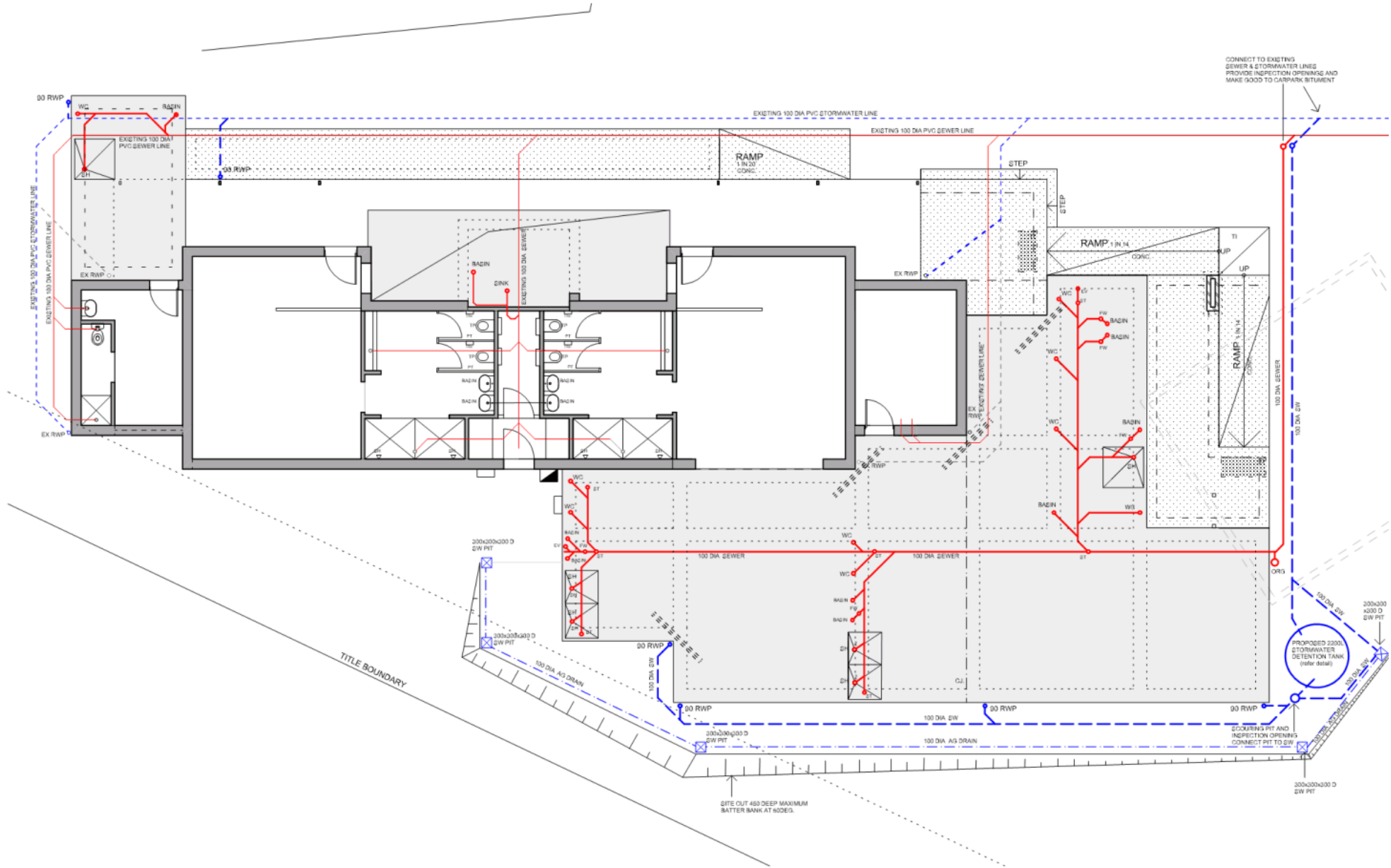


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Clare Street Oval – Amenities Upgrade DEVELOPMENT APPLICATION



Project Description	Clare Street Oval - Amenities Upgrade	Project Number	20-0023
Drawing Title	Proposed Elevations	Drawing Number	001
Client	City of Hobart	Date	Nov 2021
Scale	1:100	Sheet	A05 F



No.	Revision Description	Date



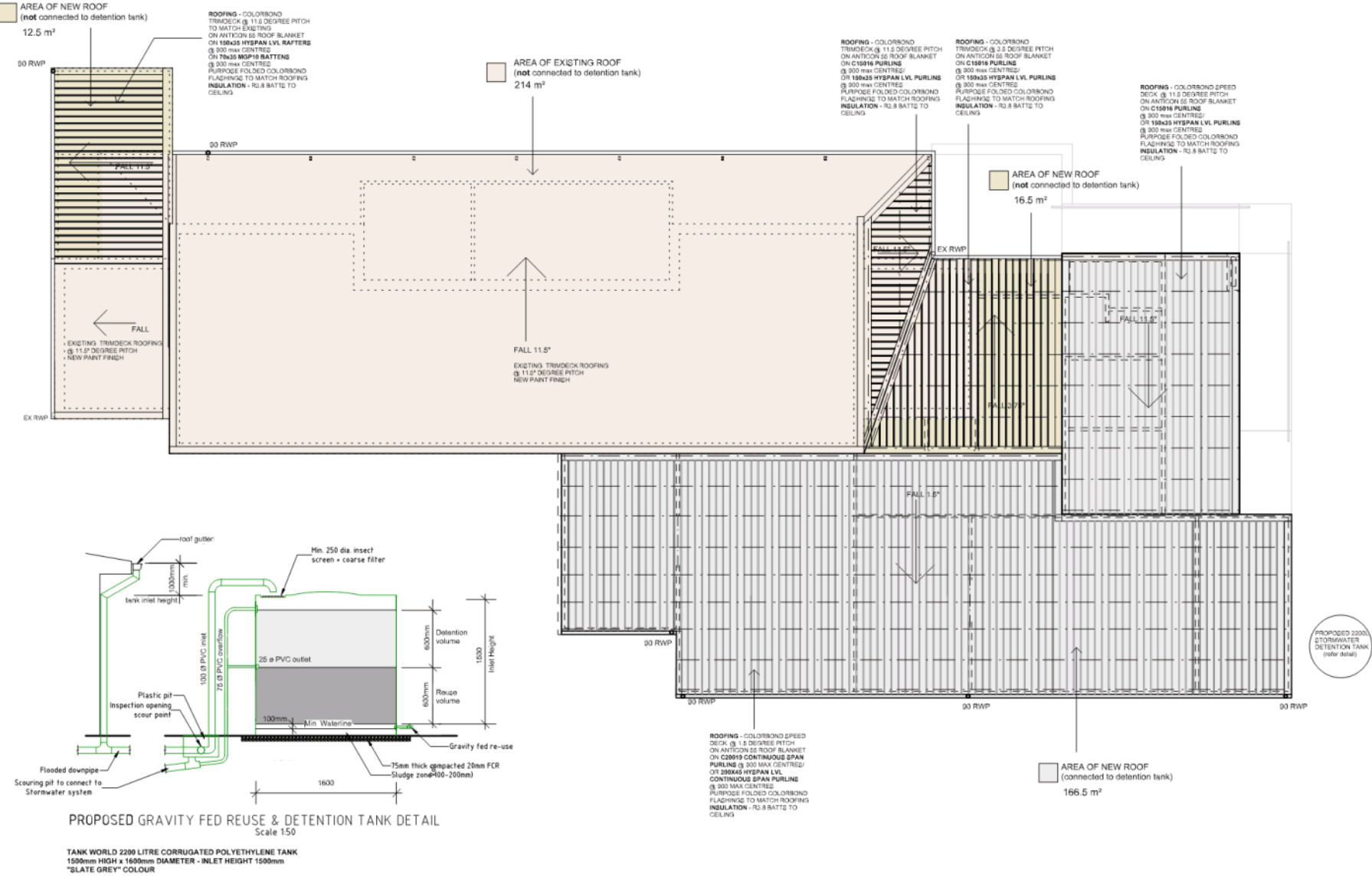
City of HOBART

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Clare Street Oval – Amenities Upgrade
DEVELOPMENT APPLICATION



Project Description		Project Number	
Clare Street Oval - Amenities Upgrade		20-0023	
Drawing Title	Scale	Drawn By	Drawn Date
Schematic Drainage Plan	AS1	KB	
Drawn		Checked	
City Amenity	Nov 2021		
Scale	1:100		A06 F



No.	Revision Description	Date



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Clare Street Oval – Amenities Upgrade DEVELOPMENT APPLICATION



Project Registration	Clare Street Oval - Amenities Upgrade	Project Number	20-0023
Drawing Title	Proposed Roof Plan/ Detention tank detail	Drawn By	KB
Client	City Amenity	Check By	KB
Date	Nov 2021	Scale	1:100
Sheet	A	Sheet Number	A07F

Application Referral - Response

From:	
Recommendation:	
Date Completed:	
Address:	62 - 66 CLARE STREET, NEW TOWN
Proposal:	Partial Demolition, Alterations, and Extension
Application No:	PLN-21-693
Assessment Officer:	Adam Smee,

Referral Officer comments:

Application Referral Cultural Heritage - Response

From:	Nick Booth
Recommendation:	Proposal is acceptable without conditions.
Date Completed:	
Address:	62 - 66 CLARE STREET, NEW TOWN
Proposal:	Partial Demolition, Alterations, and Extension
Application No:	PLN-21-693
Assessment Officer:	Adam Smee,

Referral Officer comments:

This application relates to an existing single storey, rendered block pavilion providing changing and facilities/kiosk building associated with the Clare Street Oval, a Council owned sporting facility. The Oval and thus all the buildings and associated structures are identified as being a heritage listed place.

Planning permission is sought for the demolition of a single storey public toilet block and the erection of a single storey extension to the changing facilities to create an additional 2 dedicated changing rooms with shower facilities, additional referees changing facilities, new public toilets, store, relocated and extended kiosk, new entrance deck and extension to existing verandah. As part of the application, it is intended to remove 5 relatively small trees that provide a visual screen to the public toilets. 6 new callistemon trees are proposed between the property boundary and the rear of the proposed new addition.

It is noted that the site is identified within the 'Significant Garden Study' which states that -

"The oval was once part of a farm attached to the Orphan School at St. John's Park. It was redeveloped by the New Town Board into a recreation oval c. 1900."

The site is surrounded by Radiata pines which are identified as being a community landmark. It is noted that none of these pines are identified for removal.

With regards to Development and Works other than Demolition of Heritage Places, E13.7.2 states that development must be undertaken 'in a sympathetic manner which does not cause loss of historic cultural heritage significance'; and 'designed to be subservient to the historic cultural heritage values of the place and responsive to its dominant characteristics.' There are no Acceptable Solutions.

Performance Criteria states that

P1 - Development must not result in any of the following:

- (a) loss of historic cultural heritage significance to the place through incompatible design, including in height, scale, bulk, form, fenestration, siting, materials, colours and finishes;
- (b) substantial diminution of the historic cultural heritage significance of the place through loss of significant streetscape elements including plants, trees,

fences, walls, paths, outbuildings and other items that contribute to the significance of the place.

P2 - Development must be designed to be subservient and complementary to the place through characteristics including:

- (a) scale and bulk, materials, built form and fenestration;
- (b) setback from frontage;
- (c) siting with respect to buildings, structures and listed elements;
- (d) using less dominant materials and colours.

P3 - Materials, built form and fenestration must respond to the dominant heritage characteristics of the place, but any new fabric should be readily identifiable as such.

P4 - Extensions to existing buildings must not detract from the historic cultural heritage significance of the place.

The existing changing room facilities are considered to be relatively small and clearly read in form and materials as a dating from the mid 1980's. As such, whilst they adopt the form of a traditional sporting pavilion, architecturally they provide little to the cultural significance of the place other than clearly reflecting the principal use of the oval.

The proposed extensions would essentially retain the existing form of the pavilion, retain the building as a single storey structure whilst introducing some interesting additional architectural forms considered to compliment the original building. It is also noted that the new elements would be partially clad in battens of natural finish gum and bricks, adding much needed interest to the pallet of finish materials. As such, it is considered that the proposal would not lead to a loss of cultural significance through incompatible design, materials and finishes.

Importantly, the additional form and scale of the building would still remain in keeping with the sporting facilities of the Oval, retain the sense of openness associated with such a facility, and seek to retain the same level of screening from the road as the existing building and toilet block. Most importantly of all, the proposal would have no impact upon the health of the identified Radiata pines. As such, it is considered that the proposal would not lead to a substantial diminution of the historic cultural heritage significance of the place through loss of significant streetscape elements including plants and trees. It is noted that works will be undertaken relatively close to the root system of one such pine. However a formal condition requiring that the tree be protected during construction and materials are stored within the root bowl area have been attached by the Council Arborist.

It is therefore considered that the proposal would not detract from the characteristics or setting of this Heritage Listed place and would thus comply with Clauses E.13.7.2 P1, P2, P3 & P4 of the HIPS.

Nick Booth
Heritage Officer
10 December 2021

**7.1.4 1-7 CEDAR COURT, SANDY BAY ADJACENT ROAD RESERVE -
PARTIAL DEMOLITION, ALTERATIONS, EXTENSION, FRONT
FENCING, GARAGE, ALTERATION TO ACCESS, AND
ASSOCIATED WORKS
PLN-21-388 - FILE REF: F22/4514**

Address:	1-7 Cedar Court, Sandy Bay and Adjacent Road Reserve
Proposal:	Partial Demolition, Alterations, Extension, Front Fencing, Garage, Alterations to Access, and Associated Works
Expiry Date:	26 January 2022
Extension of Time:	Not applicable
Author:	Helen Ayers

RECOMMENDATION

That pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for partial demolition, alterations, extension, front fencing, garage, alterations to access, and associated works, at 1-7 Cedar Court, Sandy Bay 7005 for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-21-388 - 1-7 CEDAR COURT SANDY BAY TAS 7005 - Final Planning Documents, except where modified below.

Reason for condition

To clarify the scope of the permit.

TW

The use and/or development must comply with the requirements of TasWater as detailed in the form Submission to Planning Authority Notice, Reference No. TWDA 2021/01237-HCC dated 27/7/2021 as attached to the permit.

Reason for condition

To clarify the scope of the permit.

THC

The use and/or development must comply with the requirements of the Tasmanian Heritage Council as detailed in the Notice of Heritage Decision, THC Works Ref: 6640 dated 10 January 2022, as attached to the permit.

Reason for condition

To clarify the scope of the permit.

ENG sw1

All stormwater from the proposed development (including but not limited to: roofed areas, ag drains, retaining wall ag drains and impervious surfaces such as driveways and paved areas) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Advice:

Under section 23 of the Urban Drainage Act 2013 it is an offence for a property owner to direct stormwater onto a neighbouring property.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

SW 9

Prior to occupancy or the commencement of the approved use (whichever occurs first), stormwater detention for stormwater discharges from the development must be installed.

A stormwater management report and design must be submitted and approved prior to the issue of any approval under the *Building Act 2016* or the commencement of work on the site (whichever occurs first). The stormwater management report and design must be prepared by a suitably qualified engineer and must:

1. include detailed design and supporting calculations of the

detention tank showing:

1. detention tank sizing such that there is no increase in flows from the developed site up to 5% AEP event and no worsening of flooding;
 2. the layout, the inlet and outlet (including long section), outlet size, overflow mechanism and invert level;
 3. the discharge rates and emptying times; and
 4. all assumptions must be clearly stated;
2. include a supporting maintenance plan, which specifies the required maintenance measures to check and ensure the ongoing effective operation of all systems, such as: inspection frequency; cleanout procedures; descriptions and diagrams of how the installed systems operate; details of the life of assets and replacement requirements.

All work required by this condition must be undertaken and maintained in accordance with the approved stormwater management report and design.

ENG 2a

Prior to first occupation or commencement of use (whichever occurs first), vehicular barriers compliant with the Australian Standard AS/NZS 1170.1:2002 must be installed to prevent vehicles running off the edge of a parking area(s), where the drop from the edge of the area to a lower level is 600mm or greater, and physical controls (i.e. wheel stops, kerbing) must be installed for drops between 150mm and 600mm. All physical controls installed shall not introduce an increase in detriment to users (e.g. limit the approved parking area dimensions).

Reason for condition

To ensure the safety of users of the access driveway and parking module and compliance with the standard.

ENG 3b

Detailed designs of the proposed parking area(s) must be submitted and approved via the City's condition endorsement process, prior to the issuing of any approval under the *Building Act 2016* or commencement of work (whichever occurs first).

The detailed designs must:

1. be substantially in accordance with the advertised plans
2. show dimensions, levels, gradients and transitions
3. show any excavations such as gate posts, retaining walls to be contained wholly within the property boundary without impacting the size or functionality of the access or turning area.
4. show retaining structures be adequately drained
5. be in accordance with the Australian Standard AS/NZS 2890.1:2004, where possible;
6. where the driveway/access/ turning area deviate from the Australian Standards be prepared by a suitably qualified engineer.

The parking area must be constructed in accordance with the approved detailed designs, prior to first occupation or commencement of use (whichever occurs first).

Reason for condition

To ensure the safety of users of the access and parking module, and compliance with the relevant Australian Standard.

ENG 4

Prior to first occupation or commencement of use (whichever occurs first), the access driveways and parking areas approved by this permit must be constructed to a sealed standard (spray seal, asphalt, concrete, impervious paving, or Council approved equivalent) and surface drained to the City's stormwater infrastructure.

Reason for condition

To ensure the safety of users of the access driveway and parking module, and that it does not detract from the amenity of users, adjoining occupiers or the environment by preventing dust, mud and sediment transport.

ENG 5

The number of car parking bays approved for use on site must be in accordance with those shown on the design drawings approved by condition ENG 3b.

Reason for condition

To ensure the provision of parking for the use is safe and efficient.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or
2. Be repaired and reinstated by the owner to the satisfaction of the Council.

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENG r3

Prior to first occupation or commencement of use (whichever occurs first), the proposed access driveway (i.e. vehicular crossing, including crossover) on the Cedar Court highway reservation must be designed and constructed in accordance with:

- Urban - TSD-R09-v3 – Urban Roads Driveways and TSD R14-v3 Type KC vehicular crossing;
- Footpath - Urban Roads Footpaths TSD-R11-v3, reinforced concrete footpath.

Design drawings must be submitted and approved as a Condition Endorsement prior to any approval under the *Building Act 2016*. The design drawings must:

1. Show the cross and long section of the driveway crossover within the highway reservation and onto the property for the new crossover at the head;
2. Detail any services or infrastructure (ie light poles, pits, awnings) at or near the proposed driveway crossover;
3. Show swept path templates in accordance with AS/NZS 2890.1 2004 B85 design template;
4. If the design deviates from the requirements of the TSD, then demonstrate that a B85 vehicle can access the driveway from the road pavement into the property without scraping the vehicle's underside;
5. Show that vehicular and pedestrian sight lines are met as per AS/NZS 2890.1 2004.
6. Be prepared and certified by a suitable qualified person, to satisfy the above requirements.

All work required by this condition must be undertaken in accordance with the approved drawings.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Please note that your proposal does not include adjustment of footpath levels. Any adjustment to footpath levels necessary to suit the design of proposed floor, parking module or driveway levels will require separate agreement from Council's Road Services Engineer and may require further planning approvals. It is advised to place a note to this effect on construction drawings for the site and/or other relevant engineering drawings to ensure that contractors are made aware of this requirement.

Reason for condition

To ensure that works will comply with the Council's standard requirements.

ENV 2

Sediment and erosion control measures, in accordance with an approved soil and water management plan (SWMP), must be installed prior to the commencement of work and maintained until

such time as all disturbed areas have been stabilised and/or restored or sealed to the Council's satisfaction.

A SWMP must be submitted as a Condition Endorsement prior to the issue of any approval under the *Building Act 2016* or the commencement of work, whichever occurs first. The SWMP must be prepared in accordance with the Soil and Water Management on Building and Construction Sites fact sheets (Derwent Estuary Program, 2008), available [here](#).

All work required by this condition must be undertaken in accordance with the approved SWMP.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To avoid the pollution and sedimentation of roads, drains and natural watercourses that could be caused by erosion and runoff from the development.

HER 9

All sandstone and red bricks from the demolition must not be disposed of and must be retained on site and reused in landscaping.

Prior to the issue of any approval under the *Building Act 2016*, revised plans must be submitted and approved as a Condition Endorsement showing the retention and reuse of all sandstone and red bricks in accordance with the above requirement.

All work required by this condition must be undertaken in accordance with the approved revised plans.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that demolition in whole or part of a heritage place does not result in the loss of historic cultural heritage values.

HER 10

The ground levels of the new court finished in SS1 and the strip of crushed limestone must be below the face to the timber verandah on the south east elevation as shown on drawing A02-00. The existing step must be retained with no increase in ground levels.

Prior to the issue of any approval under the *Building Act 2016*, revised plans must be submitted and approved as a Condition Endorsement showing the required ground levels in accordance with the above requirement.

All work required by this condition must be undertaken in accordance with the approved revised plans.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that work in whole or part of a heritage place does not result in the loss of historic cultural heritage values.

HER 11

The new exposed aggregate concrete driveway shown on drawing A02-00 and A02-03 must be of a muted design, colour and finish and be sympathetic to the heritage values of the heritage listed place.

Prior to the issue of any approval under the *Building Act 2016*, revised plans must be submitted and approved showing details of the colour and finish of the driveway in accordance with the above requirements.

All work required by this condition must be undertaken in accordance with the approved revised plans.

Reason for condition

To ensure that development in a heritage place is undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance.

HER 16

The front fence (including both the stucco brick piers and the wrought iron infill panels) along the eastern boundary, from the 'existing store' to the north western corner of the site, must be no more than 1.5m in height above natural ground level, with the wrought iron infill no less than 74% transparent.

The remaining front fence must not exceed the height shown on the approved plans, but may be reduced to match the above requirement if desired.

Prior to the issue of any approval under the *Building Act 2016*, revised plans must be submitted and approved as a Condition Endorsement showing the front fence in accordance with the above requirement.

Advice:

This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that development at a heritage place is undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance, and to provide reasonable opportunity for privacy for dwellings whilst maintaining the streetscape.

HER 17c

The external colours, materials and finishes of the approved development must be substantially in accordance with the approved plans. Any substantial change in the colours, materials and finishes requires further approval.

Reason for condition

To ensure that development at a heritage place is undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance.

HER s3

The red ochre and black truck pointing within the existing dining room (originally the flower room/conservatory) must be retained and must not be painted or covered in a plaster finish. Any painted or

plastered finishes revealed during demolition must be repaired and reinstated to original condition.

Reason for condition

To ensure that development at a heritage place is undertaken in a sympathetic manner which does not cause the loss of historic heritage values.

HER s4

All building plans submitted for approval under the *Building Act 2016* must include a notation with the following wording:

"This house is a very significant house and is heritage listed in the Heritage Code of the *Hobart Interim Planning Scheme 2015*. The works are not normal building work and care is to be taken to protect historic fabric from damage during construction or to remove original materials and construction unless part of the approved plans. There are specific heritage conditions on the permit issued requiring the retention of original fabric. If in doubt, seek specialist advice before taking action. Every effort should be made to protect existing building fabric and structural elements into the new construction where the new construction will be visible."

Reason for condition

To ensure that development at a heritage place is undertaken in a sympathetic manner which does not result in the loss of historic heritage values.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

OCCUPATION OF THE PUBLIC HIGHWAY

You may require a permit for the occupation of the public highway for construction or special event (e.g. placement of skip bin, crane, scissor lift etc). Click [here](#) for more information.

You may require a Permit to Open Up and Temporarily Occupy a Highway (for work in the road reserve). Click [here](#) for more information.

STORMWATER

Please note that in addition to a building and/or plumbing permit, development must be in accordance with the Hobart City Council's

Infrastructure By law. Click [here](#) for more information.

WORK WITHIN THE HIGHWAY RESERVATION

Please note development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

DRIVEWAY SURFACING OVER HIGHWAY RESERVATION

If a coloured or textured surface is used for the driveway access within the Highway Reservation, the Council or other service provider will not match this on any reinstatement of the driveway access within the Highway Reservation required in the future.

REDUNDANT CROSSOVERS

Redundant crossovers are required to be reinstated under the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

WORK PLACE HEALTH AND SAFETY

Appropriate occupational health and safety measures must be employed during the works to minimise direct human exposure to potentially-contaminated soil, water, dust and vapours. Click [here](#) for more information.

PROTECTING THE ENVIRONMENT

In accordance with the *Environmental Management and Pollution Control Act 1994*, local government has an obligation to "use its best endeavours to prevent or control acts or omissions which cause or are capable of causing pollution." Click [here](#) for more information.

LEVEL 1 ACTIVITIES

The activity conducted at the property is an environmentally relevant activity and a Level 1 Activity as defined under s.3 of the *Environmental Management and Pollution Control Act 1994*. For further information on what your responsibilities are, click [here](#).

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

WASTE DISPOSAL

It is recommended that the developer liaise with the Council's Cleansing and Solid Waste Unit regarding reducing, reusing and

recycling materials associated with demolition on the site to minimise solid waste being directed to landfill.




Further information regarding waste disposal can also be found on the Council's [website](#).

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.

- | | |
|---------------|--|
| Attachment A: | PLN-21-388 - 1-7 CEDAR COURT SANDY BAY
TAS 7005 - Planning Committee or Delegated
Report ↓  |
| Attachment B: | PLN-21-388 - 1-7 CEDAR COURT SANDY BAY
TAS 7005 - CPC Agenda Documents ↓  |
| Attachment C: | PLN-21-388 - 1-7 CEDAR COURT SANDY BAY
TAS 7005 - Planning Referral Officer Cultural
Heritage Report ↓  |

**APPLICATION UNDER HOBART INTERIM PLANNING SCHEME 2015**

Type of Report:	Committee
Committee:	24 January 2022
Expiry Date:	26 January 2022
Application No:	PLN-21-388
Address:	1 - 7 CEDAR COURT , SANDY BAY ADJACENT ROAD RESERVE
Applicant:	Nova Thani 1 Cedar Court
Proposal:	Partial Demolition, Alterations, Extension, Front Fencing, Garage, Alterations to Access, and Associated Works
Representations:	None
Performance criteria:	Zone Development Standards, Road and Railway Assets Code, Parking and Access Code, Historic Heritage Code

1. Executive Summary

- 1.1 Planning approval is sought for Partial Demolition, Alterations, Extension, Front Fencing, Garage, Alterations to Access, and Associated Works , at 1-7 Cedar Court, Sandy Bay.
- 1.2 More specifically the proposal includes:
 - Internal demolition of the kitchen, laundry, downstairs toilet, and upstairs bathroom.
 - Demolition of an external wall to the current dining room.
 - Removal of some trees.
 - Demolition of a landscaping retaining wall.
 - New toilet, laundry and bathroom in the existing locations.
 - Construction of a new addition off the current dining room containing a kitchen, mud room, gym, storage, and four car garage with toilet.
 - New swimming pool to the north east of the addition.
 - New crossover and driveway to access the new garage.
 - Bin enclosure by the driveway / garage.
 - Demolition of the old, and new replacement front fence.

- 1.3 The proposal relies on performance criteria to satisfy the following standards and codes:
 - 1.3.1 General Residential Zone - Frontage Fences
 - 1.3.2 Road and Railway Assets Code - Sight Distance at Accesses, Junctions and Level Crossings
 - 1.3.3 Parking and Access Code - Number of Car Parking Spaces, Design of Vehicular Accesses, and Layout of Parking Area
 - 1.3.4 Historic Heritage Code - Development Standards for Heritage Places
- 1.4 No representations were received during the statutory advertising period between 17 December 2021 and 7 January 2022.
- 1.5 The proposal is recommended for approval subject to conditions.
- 1.6 The final decision is delegated to the City Planning Committee, because it includes works in the Council Road Reservation.

2. Site Detail

- 2.1 The application site is an irregularly shaped 3336m² lot on the eastern side of Cedar Court, Sandy Bay. There is an existing dwelling of both local and state heritage significance located toward the centre of the street front boundary. The remainder of the property is a large garden setting for the dwelling. There is currently a circular driveway toward the northern end of the Cedar Court boundary, with separate entrance and exit points to the street. The site is surrounded by residential use and development.



Figure 1: The location of the application site is highlighted in yellow.

3. Proposal

- 3.1 Planning approval is sought for Partial Demolition, Alterations, Extension, Front Fencing, Garage, Alterations to Access, and Associated Works, at 1-7 Cedar Court, Sandy Bay.

3.2 More specifically the proposal is for:

- Internal demolition of the kitchen, laundry, downstairs toilet, and upstairs bathroom.
- Demolition of an external wall to the current dining room.
- Removal of some trees.
- Demolition of a landscaping retaining wall.
- New toilet, laundry and bathroom in the existing locations.
- Construction of a new addition off the current dining room containing a kitchen, mud room, gym, storage, and four car garage with toilet.
- New swimming pool to the north east of the addition.
- New crossover and driveway to access the new garage.
- Bin enclosure by the driveway / garage.
- Demolition of the old, and new replacement front fence.

4. Background

4.1 Planning application PLN-17-613 was approved on 17 October 2017, and included minor alterations to the dwelling. There is no other relevant background for this application.

5. Concerns raised by representors

5.1 No representations were received during the statutory advertising period between 17 December 2021 and 7 January 2022.

6. Assessment

6.1 The *Hobart Interim Planning Scheme 2015* is a performance based planning scheme. To meet an applicable standard, a proposal must demonstrate compliance with either an acceptable solution or a performance criterion. Where a proposal complies with a standard by relying on one or more performance criteria, the Council may approve or refuse the proposal on that basis. The ability to approve or refuse the proposal relates only to the performance criteria relied on.

6.2 The site is located within the General Residential Zone of the *Hobart Interim Planning Scheme 2015*.

6.3 There is no change proposed to the existing single dwelling use of the site. The existing use is a permitted use in the zone.

- 6.4 The proposal has been assessed against:
- 6.4.1 Part D - 10 General Residential Zone
 - 6.4.2 Part E - 5.0 Road and Railway Asses Code
 - 6.4.3 Part E - E6.0 Parking and Access Code
 - 6.4.4 Part E - E7.0 Stormwater Management Code
 - 6.4.5 Part E - E13.0 Historic Heritage Code
- 6.5 The proposal relies on the following performance criteria to comply with the applicable standards:
- 6.5.1 General Residential Zone:
Frontage Fences for all Dwellings – Part D 10.4.7 P1
 - 6.5.2 Road and Railway Asses Code:
Sight Distance at Accesses, Junctions and Level Crossings - Part E E5.6.4
 - 6.5.3 Parking and Access Code:
Number of Parking Spaces - Part E E6.6.1 P1
Design of Vehicular Accesses - Part E E6.7.2 P1
Layout of Parking Area - Part E E6.7.5 P1
 - 6.5.4 Historic Heritage Code:
Development Standards for Heritage Places - Part E E13.7.1 P1 and E13.7.2 P1, P2, P3, P4 and P5
- 6.6 Each performance criterion is assessed below.
- 6.7 Frontage Fences for all Dwellings – Part D 10.4.7 P1
- 6.7.1 There is no acceptable solution for 10.4.7 A1.
 - 6.7.2 The proposal includes a new front fence with masonry pillars and open wire mesh between. The maximum fence height is 2.4m, though it steps

along the frontage in response to the ground level, so is lower in many locations.

6.7.3 There is no acceptable solution; therefore assessment against the performance criterion is relied on.

6.7.4 The performance criterion at clause 10.4.7 P1 provides as follows:

A fence (including a free-standing wall) for a dwelling within 4.5m of a frontage must:

(a) provide for security and privacy while allowing for passive surveillance of the road; and

(b) be compatible with the height and transparency of fences in the street, having regard to:

(i) the topography of the site; and

(ii) traffic volumes on the adjoining road.

6.7.5 The proposed fence is sufficiently transparent that it offers no privacy benefit to the dwelling, rather providing for security as a result of the height. Mutual passive surveillance can be achieved as a result of this transparency. Unfortunately, there are no other fences in the street of a similar height or design, and there are no topographical concerns (such as a steep site) to support the proposed fence height, so it is difficult to justify the proposed height in the context of the site and its surrounds. The location of the site at the 'dead end' of a cul de sac further limits the ability to justify the height of the proposed fence as there is limited passing traffic.

6.7.6 Notwithstanding this, there is an existing lapped paling front fence which extends from the 'existing store' around the property to the south, south east along the front boundary. This fence is above 1.5m high, and as such creates the appearance of a side fence for this portion of the boundary. This means that there is justification for a higher, more transparent fence in this location to help restore the appearance of a front, rather than a side boundary.

6.7.7 As such, It is considered appropriate to condition a reduction in the maximum height of the frontage fence where previously there was none (from the 'existing store' around to the north), and to leave the option open to the applicant to reduce the height of the remainder of the fence consistently, or to retain the proposed height to the south as they see fit.

- 6.7.8 A condition has been proposed by Council's Cultural Heritage Officer to reduce the height of the fence to 1.5m. In light of the above, this is considered appropriate, with the modification to include the ability to reduce the whole of the fence height for consistency if the applicant desires.
- 6.7.9 The proposal complies with the performance criterion, subject to the nominated condition.
- 6.8 Sight Distance at Accesses, Junctions and Level Crossings - Part E E5.6.4
- 6.8.1 The acceptable solution at clause E5.6.4 A1 requires accesses and junctions to meet the standard specified.
- 6.8.2 The proposal includes a new site access in an irregular location.
- 6.8.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.
- 6.8.4 The performance criterion at clause E5.6.4 P1 provides as follows:
- The design, layout and location of an access, junction or rail level crossing must provide adequate sight distances to ensure the safe movement of vehicles, having regard to:*
- (a) the nature and frequency of the traffic generated by the use;*
- (b) the frequency of use of the road or rail network;*
- (c) any alternative access;*
- (d) the need for the access, junction or level crossing;*
- (e) any traffic impact assessment;*
- (f) any measures to improve or maintain sight distance; and*
- (g) any written advice received from the road or rail authority.*
- 6.8.5 The application has been considered by Council's Development Engineer, who has provided the following assessment:

The sight distance at access and junctions must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015).

Documentation submitted to date does not satisfy the Acceptable Solution for clause E5.6.4 and as such, shall be assessed under Performance Criteria.

Acceptable solution - A1:

Sight distances at:

- (a) an access or junction must comply with the Safe Intersection Sight Distance shown in Table E5.1; and - NON COMPLIANT*
- (b) rail level crossings must comply with AS1742.7 Manual of uniform traffic control devices - Railway crossings, Standards Association of Australia. - N/A*

Performance Criteria – P1: - COMPLIANT

The design, layout and location of an access, junction or rail level crossing must provide adequate sight distances to ensure the safe movement of vehicles, having regard to:

- (a) the nature and frequency of the traffic generated by the use,*
- (b) the frequency of use of the road or rail network,*
- (c) any alternative access,*
- (d) the need for the access, junction or level crossing,*
- (e) any traffic impact assessment,*
- (f) any measures to improve or maintain sight distance,*
- (g) any written advice received from the road or rail authority,*

The proposed vehicular access is located at a non-standard road terminus turning head ('WYE' style cul-de-sac), therefore the sight distances cannot be applied in accordance with the Acceptable solution by default. Submitted plans appear to indicate the proposed access is to the satisfaction of the Road Authority, see GMC-21-42.

6.8.6 The proposal complies with the performance criterion.

6.9 Number of Car Parking Spaces - Part E E6.6.1 P1

- 6.9.1 The acceptable solution at clause E6.6.1 A1 requires two (2) car parking spaces to be provided on site for the single dwelling use of the site.
- 6.9.2 The proposal includes four (4) car parking spaces in the new garage, with 'drop off facilities in the existing circular driveway, and no car parking in any other buildings / locations on the site.
- 6.9.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.
- 6.9.4 The performance criterion at clause E6.6.1 P1 provides as follows:

The number of on-site car parking spaces must be sufficient to meet the reasonable needs of users, having regard to all of the following:

(a) car parking demand;

(b) the availability of on-street and public car parking in the locality;

(c) the availability and frequency of public transport within a 400m walking distance of the site;

(d) the availability and likely use of other modes of transport;

(e) the availability and suitability of alternative arrangements for car parking provision;

(f) any reduction in car parking demand due to the sharing of car parking spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces;

(g) any car parking deficiency or surplus associated with the existing use of the land;

(h) any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement, except in the case of substantial redevelopment of a site;

(i) the appropriateness of a financial contribution in lieu of parking towards the cost of parking facilities or other transport facilities, where such facilities exist or are planned in the vicinity;

(j) any verified prior payment of a financial contribution in lieu of parking for the land;

(k) any relevant parking plan for the area adopted by Council;

(l) the impact on the historic cultural heritage significance of the site if subject to the Local Heritage Code;

(m) whether the provision of the parking would result in the loss, directly or indirectly, of one or more significant trees listed in the Significant Trees Code.

6.9.5 The application has been considered by Council's Development Engineer, who has provided the following assessment:

The parking number assessment must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015).

Documentation submitted to date does not satisfy the Acceptable Solution for clause E6.6.1 (a) and as such, shall be assessed under Performance Criteria.

Acceptable solution - A1:

The number of on-site car parking spaces must be:

(a) no less than and no greater than the number specified in Table E6.1; - NON COMPLIANT

Performance Criteria - P1:

The number of on-site car parking spaces must be sufficient to meet the reasonable needs of users, having regard to all of the following:

(a) car parking demand; - N/A

(b) the availability of on-street and public car parking in the locality; - N/A

(c) the availability and frequency of public transport within a 400m walking distance of the site; - N/A

(d) the availability and likely use of other modes of transport; - N/A

(e) the availability and suitability of alternative arrangements for car parking provision; - N/A

(f) any reduction in car parking demand due to the sharing of car parking spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces; - N/A

(g) any car parking deficiency or surplus associated with the existing use of the land; - No existing deficiency or recognized surplus.

(h) any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement, except in the case of substantial redevelopment of a site; - N/A

(i) the appropriateness of a financial contribution in lieu of parking towards the cost of parking facilities or other transport facilities, where such facilities exist or are planned in the vicinity; - N/A

(j) any verified prior payment of a financial contribution in lieu of parking for the land; - N/A

(k) any relevant parking plan for the area adopted by Council; - N/A

(l) the impact on the historic cultural heritage significance of the site if subject to the Local Heritage Code; - N/A

(m) whether the provision of the parking would result in the loss, directly or indirectly, of one or more significant trees listed in the Significant Trees Code. - No impact determined, albeit large trees noted within vicinity.

Based on the above assessment, the proposed surplus quantity may be accepted due to the intrinsic benefits of infrastructure and residential amenity.

- 6.9.6 In addition, given the size of the dwelling, the size of the site, the design of the proposed new garage, and the dead-end street on which the site is situated, it is considered appropriate to provide additional car parking to meet the reasonable needs of the users of the site.
- 6.9.7 The proposal complies with the performance criterion.
- 6.10 Design of Vehicular Accesses - E6.7.2 P1
- 6.10.1 The acceptable solution at clause E6.7.2 A1 requires vehicle accesses to be designed in accordance with the relevant Australian Standard.
- 6.10.2 The proposal includes a proposed access that is not capable of meeting the sight distances required under the relevant Australian Standard.
- 6.10.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.
- 6.10.4 The performance criterion at clause E6.7.2 P1 provides as follows:
- Design of vehicle access points must be safe, efficient and convenient, having regard to all of the following:*
- (a) *avoidance of conflicts between users including vehicles, cyclists and pedestrians;*
- (b) *avoidance of unreasonable interference with the flow of traffic on adjoining roads;*
- (c) *suitability for the type and volume of traffic likely to be generated by the use or development;*
- (d) *ease of accessibility and recognition for users.*
- 6.10.5 The application has been considered by Council's Development Engineer, who has provided the following assessment:
- The design of the vehicle access must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015).*
- Documentation submitted to date does not satisfy the Acceptable*

Solution for clause E6.7.2 and as such, shall be assessed under Performance Criteria.

Submitted plans show pedestrian sight triangles areas abutting the proposed domestic driveways are not kept clear due to proposed screening along the property boundary.

Acceptable Solution - A1:

Design of vehicle access points must comply with all of the following:

(a) in the case of non-commercial vehicle access; the location, sight distance, width and gradient of an access must be designed and constructed to comply with section 3 – “Access Facilities to Off-street Parking Areas and Queuing Areas” of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking - NON COMPLIANT

Performance Criteria - P1: - COMPLIANT

Design of vehicle access points must be safe, efficient and convenient, having regard to all of the following:

- (a) avoidance of conflicts between users including vehicles, cyclists and pedestrians,*
- (b) avoidance of unreasonable interference with the flow of traffic on adjoining roads,*
- (c) suitability for the type and volume of traffic likely to be generated by the use or development, and*
- (d) ease of accessibility and recognition for users.*

Submitted plans indicate the design will offer reasonable inter-visibility and transparency for pedestrian sight distances that may be accepted given the, location of the proposed driveways, and the low volume of traffic, on the (local) road from which the property gains access.

6.10.6 The proposal complies with the performance criterion.

6.11 Layout of Parking Area - Part E E6.7.5 P1

6.11.1 The acceptable solution at clause E6.7.5 A1 requires car parking areas to be laid out in accordance with the relevant Australian Standard.

6.11.2 The proposal includes car parking areas that are not laid out in accordance with the relevant Australian Standard.

6.11.3 The proposal does not comply with the acceptable solution; therefore assessment against the performance criterion is relied on.

6.11.4 The performance criterion at clause E6.7.5 P1 provides as follows:

The layout of car parking spaces, access aisles, circulation roadways and ramps must be safe and must ensure ease of access, egress and manoeuvring on-site.

6.11.5 The application has been considered by Council's Development Engineer, who has provided the following assessment:

The layout of the parking area must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015).

Documentation submitted to date does not satisfy the Acceptable Solution for clause E6.7.5 and as such, shall be assessed under Performance Criteria.

Acceptable Solution A1: - NON COMPLIANT

The layout of car parking spaces, access aisles, circulation roadways and ramps must be designed and constructed to comply with section 2 "Design of Parking Modules, Circulation Roadways and Ramps" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking and must have sufficient headroom to comply with clause 5.3 "Headroom" of the same Standard.

*Car Parking Space Dimensions (AS2890.1 Fig 2.2 = 2.4x5.4m):
Dimensions shown*

Car Parking Space Design Envelope (AS2890.1 Fig 5.2 300mm clearance on side): Design shown

Headroom: (AS2890.1 Fig 5.3 = 2.2m clearance): >2.1m (2.25m) detailed

Parking Space Gradient (5%): Not shown, albeit RL detailed

Aisle Width (AS2890.1 Fig 2.2 = 5.8m Class 1A): >5.8m (5.95m) detailed

Garage Door Width & Apron (AS2890.1 Fig 5.4 2.4m wide door = 7m wide apron): Not shown, albeit swept paths provided

*Parking Module Gradient (5% Acceptable, 10% Performance):
Grades shown, albeit not engineering plans*

Driveway Gradient & Width (AS2890.1 Section 2.6 = 25% and

3m): Design shown

Transitions (AS2890.1 Section 2.5.3 = 12.5% summit, 15% sag =

>2m transition): Transitions shown, albeit not engineering plans

Vehicular Barriers (AS2890.1 Section 2.4.5.3 = 600mm drop, 1:4

slope): Apparent drop extent shown, but not height

Blind Aisle End Widening (AS2890.1 Fig 2.3 = 1m extra): Non-

compliant blind aisle parking bay (CAR4 <2.6m), albeit swept paths provided

"Jockey Parking" (Performance Assessment): N/A

Performance Criteria - P1: - COMPLIANT

The layout of car parking spaces, access aisles, circulation roadways and ramps must be safe and must ensure ease of access, egress and manoeuvring on-site.

Submitted design documentation appears to meet relevant design parameters, and therefore may be accepted.

6.11.6 The proposal complies with the performance criterion.

6.12 Development Standards for Heritage Places - Part E E13.7.1 P1 and E13.7.2 P1, P2, P3, P4 and P5

6.12.1 There are no acceptable solutions for E13.7.1 A1, E13.7.2 A1, A2, 3, A4, or A5.

6.12.2 The proposal includes demolition and an extension to a place that is heritage listed in table E13.1 of the Historic Heritage Code of the Scheme, and a new front fence for the property.

6.12.3 There are no acceptable solutions; therefore assessment against the performance criterion is relied on.

6.12.4 The performance criterion at clauses E13.7.1 P1, E13.7.2 P1, P2, P3, P4, P5 and P6 provide as follows:

E13.7.1

P1 - Demolition must not result in the loss of significant fabric, form, items, outbuildings or landscape elements that contribute to the historic cultural heritage significance of the place unless all of the following are satisfied;

(a) there are, environmental, social, economic or safety reasons of

greater value to the community than the historic cultural heritage values of the place;

(b) there are no prudent and feasible alternatives;

(c) important structural or façade elements that can feasibly be retained and reused in a new structure, are to be retained;

(d) significant fabric is documented before demolition.

E13.7.2

P1 - Development must not result in any of the following:

(a) loss of historic cultural heritage significance to the place through incompatible design, including in height, scale, bulk, form, fenestration, siting, materials, colours and finishes;

(b) substantial diminution of the historic cultural heritage significance of the place through loss of significant streetscape elements including plants, trees, fences, walls, paths, outbuildings and other items that contribute to the significance of the place.

P2 - Development must be designed to be subservient and complementary to the place through characteristics including:

(a) scale and bulk, materials, built form and fenestration;

(b) setback from frontage;

(c) siting with respect to buildings, structures and listed elements;

(d) using less dominant materials and colours.

P3 - Materials, built form and fenestration must respond to the dominant heritage characteristics of the place, but any new fabric should be readily identifiable as such.

P4 - Extensions to existing buildings must not detract from the historic cultural heritage significance of the place.

P5 - New front fences and gates must be sympathetic in design, (including height, form, scale and materials), to the style, period and characteristics of the building to which they belong.

- 6.12.5 The application has been considered by Council's Cultural Heritage Officer, who has provided the following assessment:

This application is for demolition and an extension to a place that is heritage listed in table E13.1 of the Historic Heritage Code of the Scheme.

The place is known as 'The Gables' and was designed by Melbourne architect Chris Cowper and constructed in 1911. It is a significant building and was the home of Henry Allport for some of its time. Henry Allport is well known for various reasons including the fact that he bequeathed the Allport collection of decorative arts, rare books and art and other items to the people of Tasmania in 1965, a collection that remains one of the most generous in Tasmania's short European history. This collection was once kept in this house and items including the chandeliers from the house are now part of the Allport Library and Museum of Fine Arts.

The house has numerous original features and is a one of the most extravagant examples of Federation Queen Anne architecture in Hobart, with numerous gables, terra cotta roof, ornate ridge tiles and gargoyle finials, tuck pointed brickwork, bay windows, shingles, prominent and highly ornate chimneys. Inside, the house has extensive and grand wood paneling, plate rails, extensive timber paneled doors and ornate ceiling details as well as Art Nouveau detailing on door handles and tiles. Surprisingly, the internal staircase is relatively modest and a close examination of it indicates that it has been modified in recent decades with the introduction of balusters with love hearts a decorative feature that is not consistent with other timber detailing. Some other alterations that were made in the 1970s and 1980s include altered tiling in the bathrooms, new fixtures and fittings in the kitchen and bathroom. The land (3302m²) on which the house sits once had a driveway from Maning Ave. It was a large internal and private home with expansive hedges (these are specifically heritage listed) with a tennis court to the rear. The block was subdivided in the post-war period (date unknown, but possibly 1960s/70s) with a cul-de-sac that extends around the side of the house. The front entrance of the house faces Cedar Court and has no front fence. The western side elevation has a recent 1.8 m high paling fence and is a side boundary fence.

This proposal follows on from a previous and earlier application and permit issued (PLN-17-613) for internal and external changes including the reconfiguration of rooms and connections between rooms and the introduction of new elements. Since that permit was issued, the property has changed hands and some of the already approved changes have not proceeded. A number of conditions were included in the permit issued. HER s3 and HER s4 must be included on any permit issued.

This application has some minor demolition, but the vast majority of the application is for new work, a new front fence, a large rear extension for a new kitchen, 4 car garage, gym, store and the enclosure of an existing/original verandah of the heritage part of the house. Also part of the application is a new rear vehicular gate and driveway, courtyard and minor landscaping, as well as the resurfacing of the front semi-circular driveway. It should be noted that the new kitchen which was relocated as part of the PLN-17-613 application is to be demolished and that room will be a TV room.

The following provisions of the Historic Heritage Code of the Scheme apply; E13.7.1 P1 - demolition and E13.7.2 P1, P2, P3, P4 and P5 - new work - extension and front fencing.

Clause E13.7.1 P1 states:

Demolition must not result in the loss of significant fabric, form, items, outbuildings or landscape elements that contribute to the historic cultural heritage significance of the place unless all of the following are satisfied;

- (a) there are, environmental, social, economic or safety reasons of greater value to the community than the historic cultural heritage values of the place;*
- (b) there are no prudent and feasible alternatives;*
- (c) important structural or façade elements that can feasibly be retained and reused in a new structure, are to be retained;*
- (d) significant fabric is documented before demolition.*

Assessment:

Demolition involves the 2018 kitchen, the external south-east wall of the existing dining room, the timber paling boundary fence (installed in 2018), stone retaining walls, steps, concrete retaining wall (to remnants of rear tennis court) and rear elements of landscaping including trees.

The proposed demolition relates to what was a glazed flower room or conservatory, which was converted to a kitchen and more recently as a dining room. Demolition is proposed to remove the wall shown in the above image to allow for connection through to the new kitchen and garage wing and will involve the removal of brick, sandstone and glazing. Although there is no concern about the removal of the sandstone as this is later infill from the post Allport era the demolition of the brick is unfortunate, particularly given the intact state of the house as a self-contained large house with no accretions or additions. As a particular large house to start with, it is difficult as such to conceive that any addition is required. However, this application must be assessed against the relevant provisions and determine if the demolition results in the loss of heritage values. In regard to the location of the proposed demolition, it is to the rear elevation, part of the functional, rather than dress circle part of the house which is potentially the most logical or rational location for a connection to another building/extension should one be needed. The retention of the character of red ochre and black tuck pointing brick work is considered appropriate. It is considered that a condition of permit be included to ensure that its original wall finishes and details are retained.

The remnant concrete foundations of the tennis court and other sandstone elements of walls and steps will be demolished to make way for the large extension to the rear. The tennis court has been subsumed by the the creation of the Cedar Court cul-de-sac subdivision and and subsequent new house at 9 Cedar Court. Other sandstone features in the garden are from the era of the house but its positioning and the techniques employed suggest that it has been repositioned over the course of the last sixty years. It is recommended that all sandstone and red brick from the demolished low retaining wall at the rear, remain on site and be reused in landscaping. This can be achieved by a condition of permit.

New work

The new work includes:

new single storey extension and addition to the south east of the original house, built over two levels for a four car garage, kitchen, mud room, swimming pool, store and gym etc, associated vehicle hard stand and gates and driveway and footpath.

new skylight within the verandah to the south west part of the

*original house.
new front fence and side fence*

The new proposal must be assessed against the following clauses:

E13.7.2 P1

Development must not result in any of the following:

- (a) loss of historic cultural heritage significance to the place through incompatible design, including in height, scale, bulk, form, fenestration, siting, materials, colours and finishes;*
- (b) substantial diminution of the historic cultural heritage significance of the place through loss of significant streetscape elements including plants, trees, fences, walls, paths, outbuildings and other items that contribute to the significance of the place.*

E13.7.2 P2

Development must be designed to be subservient and complementary to the place through characteristics including:

- (a) scale and bulk, materials, built form and fenestration;*
- (b) setback from frontage;*
- (c) siting with respect to buildings, structures and listed elements;*
- (d) using less dominant materials and colours.*

E13.7.2 P3

Materials, built form and fenestration must respond to the dominant heritage characteristics of the place, but any new fabric should be readily identifiable as such.

E13.7.2 P5

New front fences and gates must be sympathetic in design, (including height, form, scale and materials), to the style, period and characteristics of the building to which they belong.

Assessment:

The proposed front fence is a stucco and painted finished brick pier with a wrought iron infill sections that take their design cues from the existing metal gates which are being relocated to the north elevation. The colour of the paint is described as 'calf skin' a light-mid brown grey colour, no doubt chosen to tie in with the new colour scheme to the house. The fence piers have a maximum height of approximately 2.3 metres and minimum of 1.8 metres around the full extent of the proposed fence. The plinth has a height of approximately 0.3 metres. As such, the fence does not

follow the convention of a lower fence at the front allowing the house to be shown off to its full advantage in a traditional fashion. In this instance, the proposed fence is considered too high for the setting although the proposed design, which takes its cues from the existing metal gate, is a valid approach. It is appropriate for a condition of permit to reduce the height of the piers on the front fence as shown in the west elevation and north elevation to 1.5 metres. This can be achieved as a condition of permit.

The existing semi-circular driveway is being retained, and while the existing plans indicate that this driveway will not be used for parking, the proposed configuration indicates that it will still remain as such. The only change is the resurfacing of the semi-circular driveway from pavers to asphalt and concrete to the rear. A condition of permit to specify the colour of the concrete to the rear is appropriate.

The extension to the rear, although large in footprint, is separated by a recess allowing the corner window of the existing dining room to remain. The garage and kitchen extension is over two levels, the garage sited higher on the 'tennis court' level. Both are box-like and finished in stucco and painted brickwork and red brick with white steel window frames. This approach is typical of the output of this designers in that there is the production of a contemporary, minimalist and sleek modern product. In this regard it does not seek to emulate or replicate the exuberant architecture of the Gables.

The proposal shows a limestone strip separating the original rear verandah and the new courtyard. This is acceptable, but greater clarity is required to ensure that the step up to the verandah remains. This can be achieved by a condition of permit.

The proposal with appropriate conditions of permit satisfies the above provisions of the Historic Heritage Code of the Scheme.

- 6.12.6 The proposal complies with the performance criteria, subject to the nominated conditions.

7. Discussion

- 7.1 Planning approval is sought for Partial Demolition, Alterations, Extension, Front Fencing, Garage, Alterations to Access, and Associated Works, at 1-7 Cedar Court, Sandy Bay.
- 7.2 The application was advertised and no representations were received.
- 7.3 The proposal has been assessed against the relevant provisions of the planning scheme and is considered to perform well.
- 7.4 The proposal has been assessed by other Council officers, including the Council's Development Engineer, Cultural Heritage Officer, Roads Engineer, and Stormwater Engineer. The officers have raised no objection to the proposal, subject to conditions.
- 7.5 The proposal has been referred to TasWater and Heritage Tasmania, both of whom have provided advice and conditions to be included should a permit issue for the works.
- 7.6 The proposal is recommended for approval.

8. Conclusion

- 8.1 The proposed Partial Demolition, Alterations, Extension, Front Fencing, Garage, Alterations to Access, and Associated Works, at 1-7 Cedar Court, Sandy Bay satisfies the relevant provisions of the *Hobart Interim Planning Scheme 2015*, and as such is recommended for approval.

9. Recommendations

That: Pursuant to the *Hobart Interim Planning Scheme 2015*, the City Planning Committee, in accordance with the delegations contained in its terms of reference, approve the application for Partial Demolition, Alterations, Extension, Front Fencing, Garage, Alterations to Access, and Associated Works, at 1-7 Cedar Court, Sandy Bay for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-21-388 - 1-7 CEDAR COURT SANDY BAY TAS 7005 - Final Planning Documents, except where modified below.

Reason for condition

To clarify the scope of the permit.

TW

The use and/or development must comply with the requirements of TasWater as detailed in the form Submission to Planning Authority Notice, Reference No. TWDA 2021/01237-HCC dated 27/7/2021 as attached to the permit.

Reason for condition

To clarify the scope of the permit.

THC

The use and/or development must comply with the requirements of the Tasmanian Heritage Council as detailed in the Notice of Heritage Decision, THC Works Ref: 6640 dated 10 January 2022, as attached to the permit.

Reason for condition

To clarify the scope of the permit.

ENG sw1

All stormwater from the proposed development (including but not limited to: roofed areas, ag drains, retaining wall ag drains and impervious surfaces such as driveways and paved areas) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Advice: Under section 23 of the Urban Drainage Act 2013 it is an offence for a property owner to direct stormwater onto a neighbouring property.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

SW 9

Prior to occupancy or the commencement of the approved use (whichever occurs first), stormwater detention for stormwater discharges from the development must be installed.

A stormwater management report and design must be submitted and approved prior to the issue of any approval under the *Building Act 2016* or the commencement of work on the site (whichever occurs first). The stormwater management report and design must be prepared by a suitably qualified engineer and must:

1. include detailed design and supporting calculations of the detention tank showing:
 1. detention tank sizing such that there is no increase in flows from the developed site up to 5% AEP event and no worsening of flooding;
 2. the layout, the inlet and outlet (including long section), outlet size, overflow mechanism and invert level;
 3. the discharge rates and emptying times; and
 4. all assumptions must be clearly stated;
2. include a supporting maintenance plan, which specifies the required maintenance measures to check and ensure the ongoing effective operation of all systems, such as: inspection frequency; cleanout procedures; descriptions and diagrams of how the installed systems

operate; details of the life of assets and replacement requirements.

All work required by this condition must be undertaken and maintained in accordance with the approved stormwater management report and design.

ENG 2a

Prior to first occupation or commencement of use (whichever occurs first), vehicular barriers compliant with the Australian Standard AS/NZS 1170.1:2002 must be installed to prevent vehicles running off the edge of a parking area(s), where the drop from the edge of the area to a lower level is 600mm or greater, and physical controls (i.e. wheel stops, kerbing) must be installed for drops between 150mm and 600mm. All physical controls installed shall not introduce an increase in detriment to users (e.g. limit the approved parking area dimensions).

Reason for condition

To ensure the safety of users of the access driveway and parking module and compliance with the standard.

ENG 3b

Detailed designs of the proposed parking area(s) must be submitted and approved via the City's condition endorsement process, prior to the issuing of any approval under the *Building Act 2016* or commencement of work (whichever occurs first).

The detailed designs must:

1. be substantially in accordance with the advertised plans
2. show dimensions, levels, gradients & transitions
3. show any excavations such as gate posts, retaining walls to be contained wholly within the property boundary without impacting the size or functionality of the access or turning area.
4. show retaining structures be adequately drained
5. be in accordance with the Australian Standard AS/NZS2890.1:2004, where possible;
6. where the driveway/access/ turning area deviate from the Australian Standards be prepared by a suitably qualified engineer.

The parking area must be constructed in accordance with the approved detailed designs, prior to first occupation or commencement of use

(whichever occurs first).

Reason for condition

To ensure the safety of users of the access and parking module, and compliance with the relevant Australian Standard.

ENG 4

Prior to first occupation or commencement of use (whichever occurs first), the access driveways and parking areas approved by this permit must be constructed to a sealed standard (spray seal, asphalt, concrete, impervious paving, or Council approved equivalent) and surface drained to the City's stormwater infrastructure.

Reason for condition

To ensure the safety of users of the access driveway and parking module, and that it does not detract from the amenity of users, adjoining occupiers or the environment by preventing dust, mud and sediment transport.

ENG 5

The number of car parking bays approved for use on site must be in accordance with those shown on the design drawings approved by Condition ENG 3b.

Reason for condition

To ensure the provision of parking for the use is safe and efficient.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. **Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or**
2. **Be repaired and reinstated by the owner to the satisfaction of the Council.**

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENG r3

Prior to first occupation or commencement of use (whichever occurs first), the proposed access driveway (i.e. vehicular crossing, including crossover) on the Cedar Court highway reservation must be designed and constructed in accordance with:

- Urban - TSD-R09-v3 – Urban Roads Driveways and TSD R14-v3 Type KC vehicular crossing;
- Footpath - Urban Roads Footpaths TSD-R11-v3, reinforced concrete footpath.

Design drawings must be submitted and approved as a Condition Endorsement prior to any approval under the Building Act 2016. The design drawings must:

1. Show the cross and long section of the driveway crossover within the highway reservation and onto the property for the new crossover at the head;
2. Detail any services or infrastructure (ie light poles, pits, awnings) at or near the proposed driveway crossover;
3. Show swept path templates in accordance with AS/NZS 2890.1 2004 B85 design template;
4. If the design deviates from the requirements of the TSD, then demonstrate that a B85 vehicle can access the driveway from the road pavement into the property without scraping the vehicle's underside;
5. Show that vehicular and pedestrian sight lines are met as per AS/NZS

2890.1 2004.

6. **Be prepared and certified by a suitable qualified person, to satisfy the above requirements.**

All work required by this condition must be undertaken in accordance with the approved drawings.

Advice:

- *This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.*
- *Please note that your proposal does not include adjustment of footpath levels. Any adjustment to footpath levels necessary to suit the design of proposed floor, parking module or driveway levels will require separate agreement from Council's Road Services Engineer and may require further planning approvals. It is advised to place a note to this effect on construction drawings for the site and/or other relevant engineering drawings to ensure that contractors are made aware of this requirement.*

Reason for condition

To ensure that works will comply with the Council's standard requirements.

ENV 2

Sediment and erosion control measures, in accordance with an approved soil and water management plan (SWMP), must be installed prior to the commencement of work and maintained until such time as all disturbed areas have been stabilised and/or restored or sealed to the Council's satisfaction.

A SWMP must be submitted as a Condition Endorsement prior to the issue of any approval under the *Building Act 2016* or the commencement of work, whichever occurs first. The SWMP must be prepared in accordance with the Soil and Water Management on Building and Construction Sites fact sheets (Derwent Estuary Program, 2008), available [here](#).

All work required by this condition must be undertaken in accordance with the approved SWMP.

Advice: This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for Condition

To avoid the pollution and sedimentation of roads, drains and natural watercourses

that could be caused by erosion and runoff from the development.

HER 9

All sandstone and red bricks from the demolition must not be disposed of and must be retained on site and reused in landscaping.

Prior to the issue of any approval under the *Building Act 2016*, revised plans must be submitted and approved as a Condition Endorsement showing the retention and reuse of all sandstone and red bricks in accordance with the above requirement.

All work required by this condition must be undertaken in accordance with the approved revised plans.

Advice: This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that demolition in whole or part of a heritage place does not result in the loss of historic cultural heritage values.

HER 10

The ground levels of the new court finished in SS1 and the strip of crushed limestone must be below the face to the timber verandah on the south east elevation as shown on drawing A02-00. The existing step must be retained with no increase in ground levels.

Prior to the issue of any approval under the *Building Act 2016*, revised plans must be submitted and approved as a Condition Endorsement showing the required ground levels in accordance with the above requirement.

All work required by this condition must be undertaken in accordance with the approved revised plans.

Advice: This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that work in whole or part of a heritage place does not result in the loss of

historic cultural heritage values.

HER 11

The new exposed aggregate concrete driveway shown on drawing A02-00 and A02-03 must be of a muted design, colour and finish and be sympathetic to the heritage values of the heritage listed place.

Prior to the issue of any approval under the *Building Act 2016*, revised plans must be submitted and approved showing details of the colour and finish of the driveway in accordance with the above requirements.

All work required by this condition must be undertaken in accordance with the approved revised plans.

Reason for condition

To ensure that development in a heritage place is undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance.

HER 16

The front fence (including both the stucco brick piers and the wrought iron infill panels) along the eastern boundary, from the 'existing store' to the north western corner of the site, must be no more than 1.5m in height above natural ground level, with the wrought iron infill no less than 74% transparent.

The remaining front fence must not exceed the height shown on the approved plans, but may be reduced to match the above requirement if desired.

Prior to the issue of any approval under the *Building Act 2016*, revised plans must be submitted and approved as a Condition Endorsement showing the front fence in accordance with the above requirement.

Advice: This condition requires further information to be submitted as a Condition Endorsement. Refer to the Condition Endorsement advice at the end of this permit.

Reason for condition

To ensure that development at a heritage place is undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance, and to provide reasonable opportunity for privacy for dwellings whilst maintaining the streetscape.

HER 17c

The external colours, materials and finishes of the approved development must be substantially in accordance with the approved plans. Any substantial change in the colours, materials and finishes requires further approval.

Reason for condition

To ensure that development at a heritage place is undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance.

HER s3

The red ochre and black truck pointing within the existing dining room (originally the flower room/conservatory) must be retained and must not be painted or covered in a plaster finish. Any painted or plastered finishes revealed during demolition must be repaired and reinstated to original condition.

Reason for condition

To ensure that development at a heritage place is undertaken in a sympathetic manner which does not cause the loss of historic heritage values.

HER s4

All building plans submitted for approval under the *Building Act 2016* must include a notation with the following wording:

"This house is a very significant house and is heritage listed in the Heritage Code of the Hobart Interim Planning Scheme 2015. The works are not normal building work and care is to be taken to protect historic fabric from damage during construction or to remove original materials and construction unless part of the approved plans. There are specific heritage conditions on the permit issued requiring the retention of original fabric. If in doubt, seek specialist advice before taking action. Every effort should be made to protect existing building fabric and structural elements into the new construction where the new construction will be visible."

Reason for condition

To ensure that development at a heritage place is undertaken in a sympathetic manner which does not result in the loss of historic heritage values.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

CONDITION ENDORSEMENT

If any condition requires that further documents are submitted and approved, you will need to submit the relevant documentation to satisfy the condition via the Condition Endorsement Submission on Council's [online services e-planning portal](#). Detailed instructions can be found [here](#).

A fee of 2% of the value of the works for new public assets (stormwater infrastructure, roads and related assets) will apply for the condition endorsement application.

Once approved, the Council will respond to you via email that the condition has been endorsed (satisfied).

Where building approval is also required, it is recommended that documentation for condition endorsement be submitted well before submitting documentation for building approval. Failure to address condition endorsement requirements prior to submitting for building approval may result in unexpected delays.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

OCCUPATION OF THE PUBLIC HIGHWAY

You may require a permit for the occupation of the public highway for construction or special event (e.g. placement of skip bin, crane, scissor lift etc). Click [here](#) for more information.

You may require a Permit to Open Up and Temporarily Occupy a Highway (for work in the road reserve). Click [here](#) for more information.

STORM WATER

Please note that in addition to a building and/or plumbing permit, development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

WORK WITHIN THE HIGHWAY RESERVATION

Please note development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

DRIVEWAY SURFACING OVER HIGHWAY RESERVATION

If a coloured or textured surface is used for the driveway access within the Highway Reservation, the Council or other service provider will not match this on any reinstatement of the driveway access within the Highway Reservation required in the future.

REDUNDANT CROSSOVERS

Redundant crossovers are required to be reinstated under the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

WORK PLACE HEALTH AND SAFETY

Appropriate occupational health and safety measures must be employed during the works to minimise direct human exposure to potentially-contaminated soil, water, dust and vapours. Click [here](#) for more information.

PROTECTING THE ENVIRONMENT

In accordance with the *Environmental Management and Pollution Control Act 1994*, local government has an obligation to "use its best endeavours to prevent or control acts or omissions which cause or are capable of causing pollution." Click [here](#) for

more information.

LEVEL 1 ACTIVITIES

The activity conducted at the property is an environmentally relevant activity and a Level 1 Activity as defined under s.3 of the *Environmental Management and Pollution Control Act 1994*. For further information on what your responsibilities are, click [here](#).

NOISE REGULATIONS

Click [here](#) for information with respect to noise nuisances in residential areas.

WASTE DISPOSAL

It is recommended that the developer liaise with the Council's Cleansing and Solid Waste Unit regarding reducing, reusing and recycling materials associated with demolition on the site to minimise solid waste being directed to landfill.

Further information regarding waste disposal can also be found on the Council's [website](#).

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.



(Helen Ayers)

Development Appraisal Planner

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Karen Abey)

Manager Development Appraisal

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Date of Report: 13 January 2022

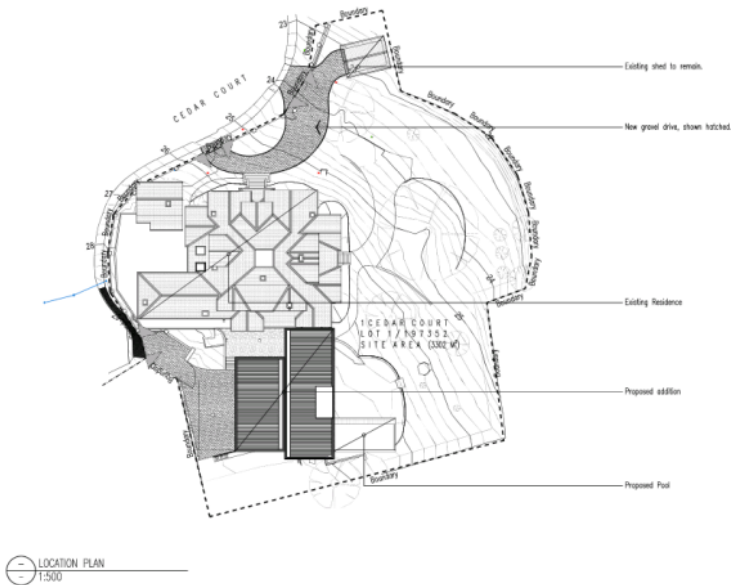
Attachment(s):

Attachment B - CPC Agenda Documents

Attachment C - Planning Referral Officer Report (Cultural Heritage Officer)

DRAWING SCHEDULE - ARCHITECTURAL												
		1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022	1/1/2022
DRAWING NUMBER	TITLE											
A00-01	Cover Page and Location Plan	F	L	M	N	O	P	Q	R	S		
A00-02	Site Plan	F	L	M	N	O	P	Q	R	S		
A02-00	Demolition Plan - Ground Floor	F	L	M	N	O	P	Q	R	S		
A02-01	Demolition Plan - Ground Floor											
A02-00	Plan Plan - Ground Floor	F	L	M	N	O	P	Q	R	S		
A02-01	Plan Plan - First Floor	F	L	M	N	O	P	Q	R	S		
A02-02	Plan Plan - Ground Floor											
A02-03	Plan Plan - Ground Floor											
A02-04	Plan Plan - Ground Floor											
A04-00	Elevations	F	L	M	N	O	P	Q	R	S		
A04-01	Elevations	F	L	M	N	O	P	Q	R	S		
A04-02	Elevations	F	L	M	N	O	P	Q	R	S		
A04-03	Elevations	F	L	M	N	O	P	Q	R	S		
A05-00	Sections											
A05-01	Sections											
A05-02	Internal Elevations											

DESIGN DETAILS		
TITLE REFERENCE		
DESIGN CASE FILED	1	
VOLUME	LIMITED	
FLOOR AREA		
EXISTING SITE AREA	2,002	M2
EXISTING BUILDING FLOOR	246	M2
EXISTING FIRST FLOOR	200	M2
EXISTING SHEDS	57	M2
PROPOSED GROUND FLOOR	230	M2
PROPOSED TOTAL GROUND FLOOR	275	M2
DESIGN WIND CLASSIFICATION		
DESIGN WIND VELOCITY (M/S)	N/S	N/S
DESIGN WIND VELOCITY (M/S)	N/S	N/S
SOIL CLASSIFICATION	TBC	TBC
CLIMATE ZONE	7	
SOL RADIATION	-	
ALFANE AREA	-	
CORROSION ENVIRONMENT	-	
OTHER FACTORS	-	



LOCATION OF ALL NEIGHBOURING STRUCTURES ARE INDICATED ONLY



Hubert
40 Goodwin Street Sydney NSW 1500
7 (02) 9550 1000
ADD-000000
3 Thick Road South Yarra VIC 3141
5 (03) 9597 1000
info@prestons.com.au
prestons.com.au

The Author/Client/Owner shall verify all dimensions and levels shown on this drawing, and shall be responsible for any errors and omissions and shall be responsible for any costs incurred in connection with the preparation of this drawing.

This part of the drawing shall be regarded as a preliminary drawing and shall not be used for construction without the consent of the Author/Client/Owner.



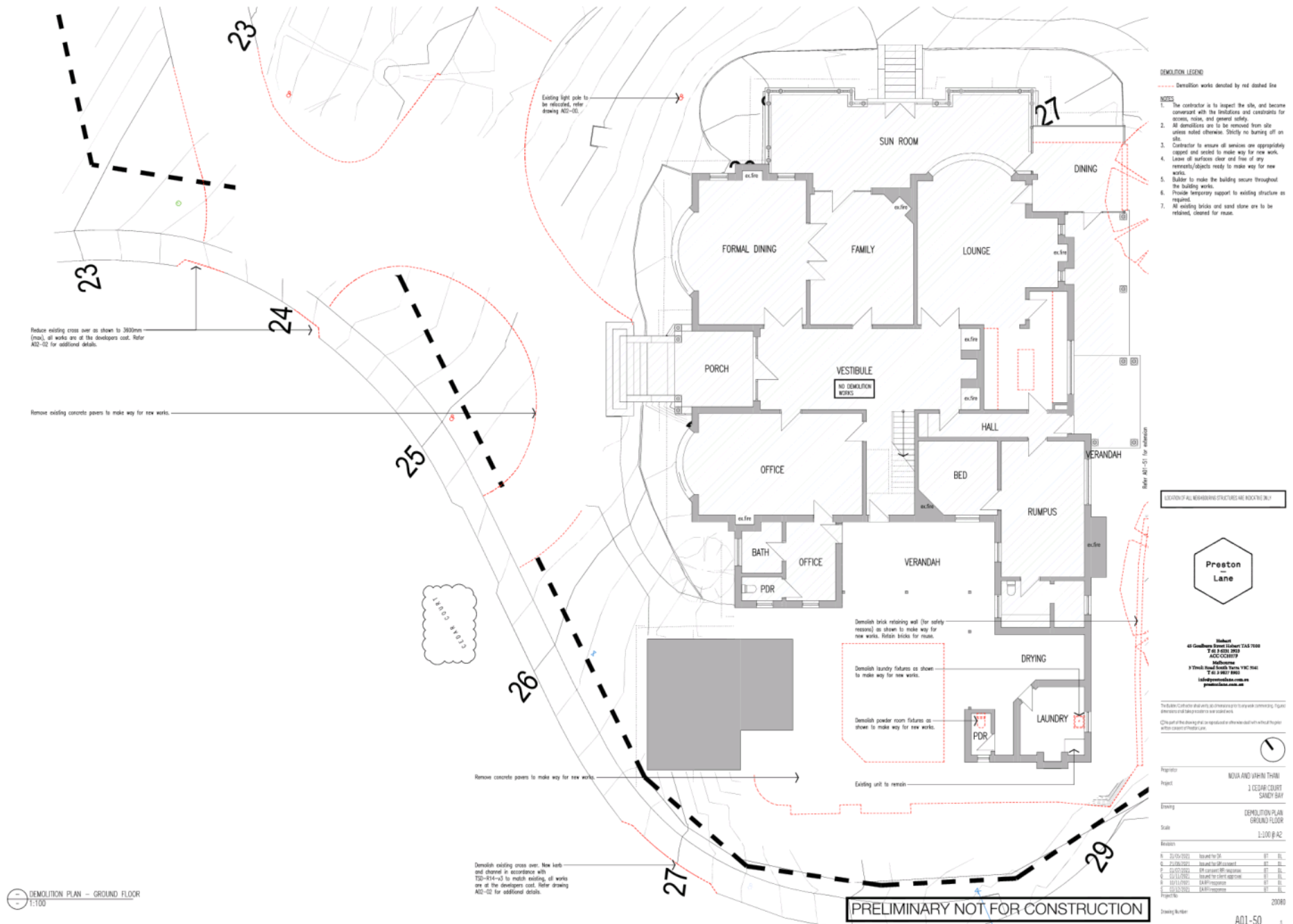
Register
Project
Drawing
Scale
Revision

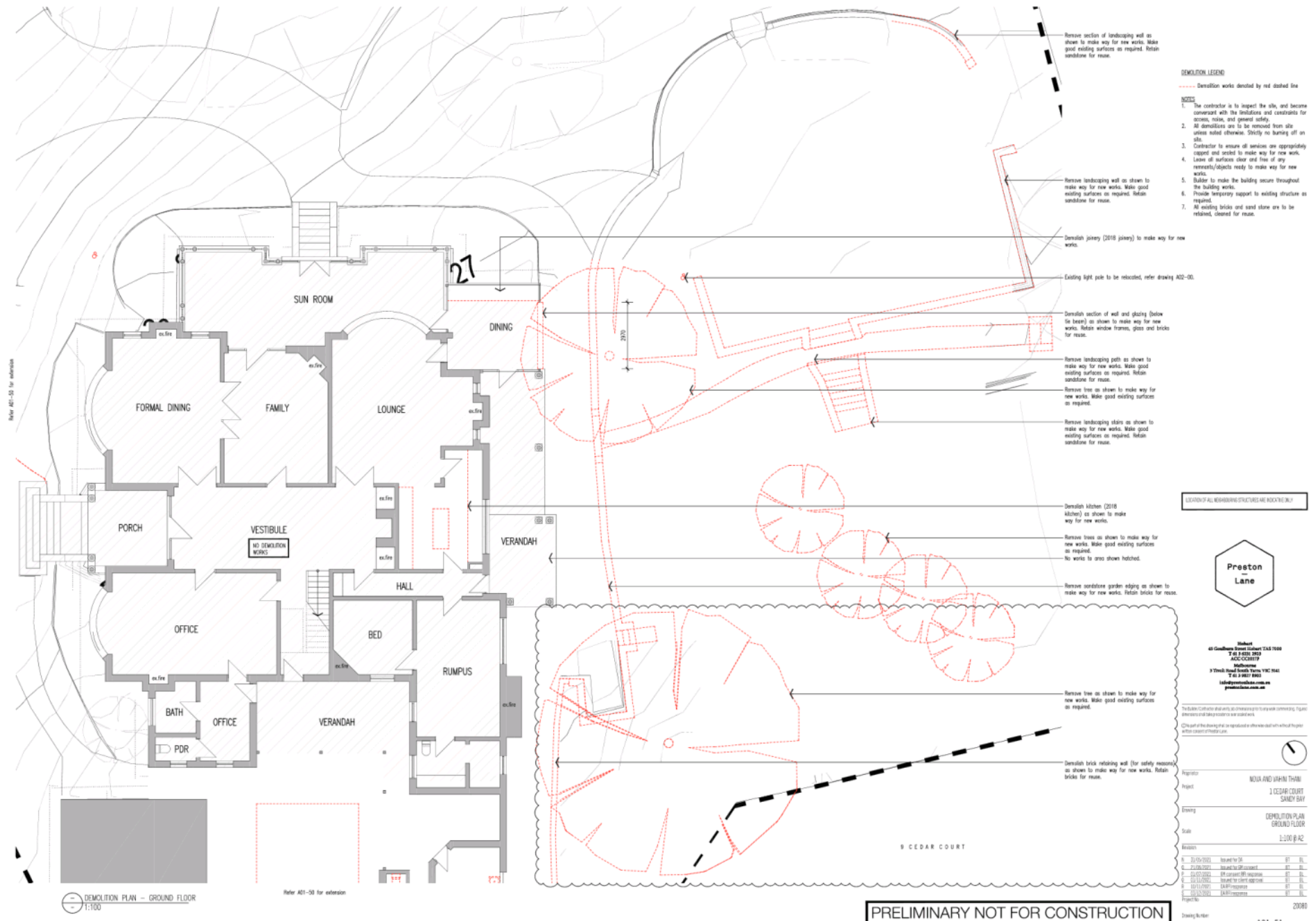
NOVA AND VINN THIRU
1 CEDAR COURT
SANDY BAY
COVER SHEET
AND LOCATION PLAN
1:500 @ A2

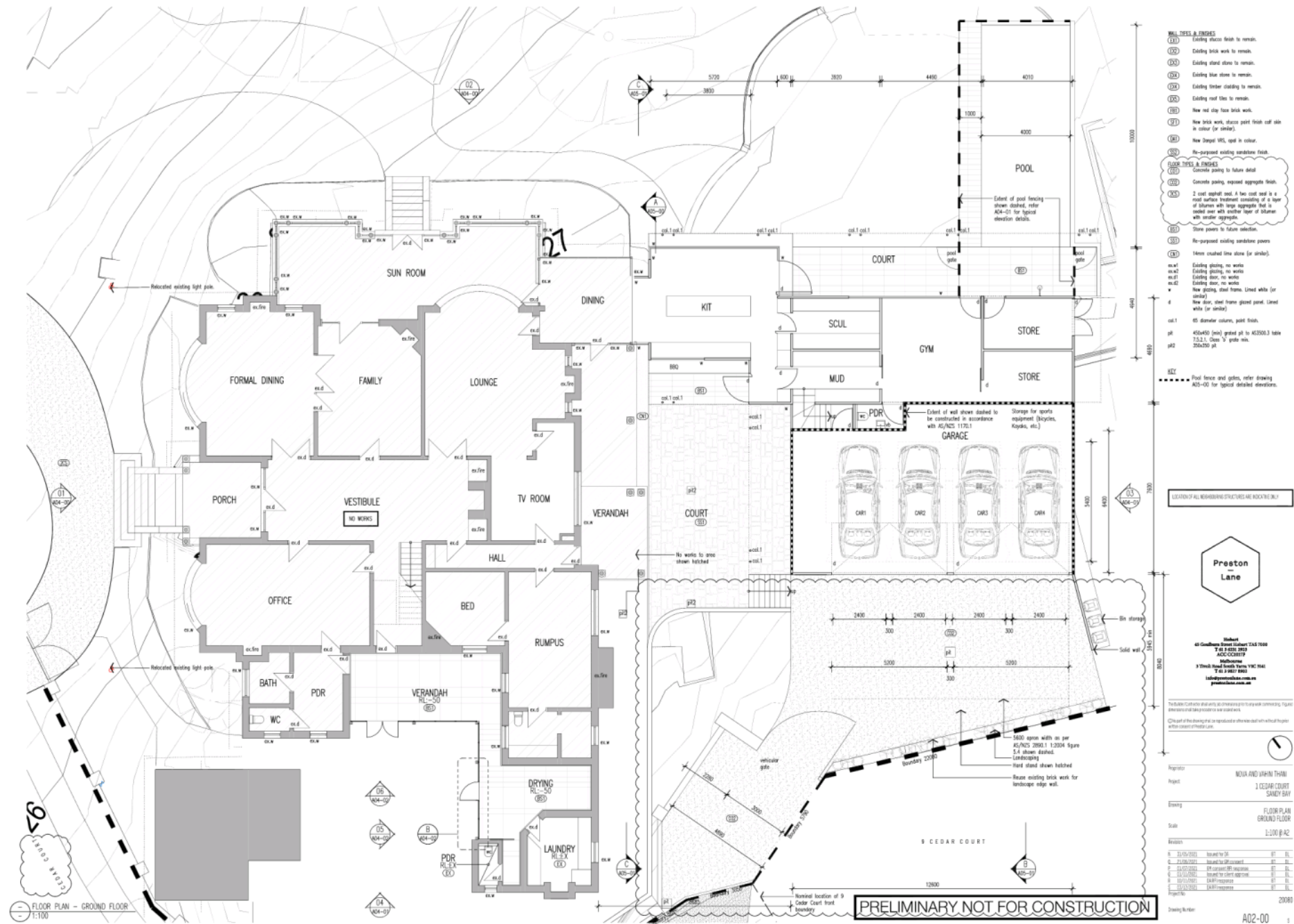
Revised
R 21/01/2021 Issued for 3D 01/01/21
P 21/01/2021 Issued for 3D 01/01/21
Q 21/01/2021 Issued for 3D 01/01/21
R 21/01/2021 Issued for 3D 01/01/21
S 21/01/2021 Issued for 3D 01/01/21
T 21/01/2021 Issued for 3D 01/01/21

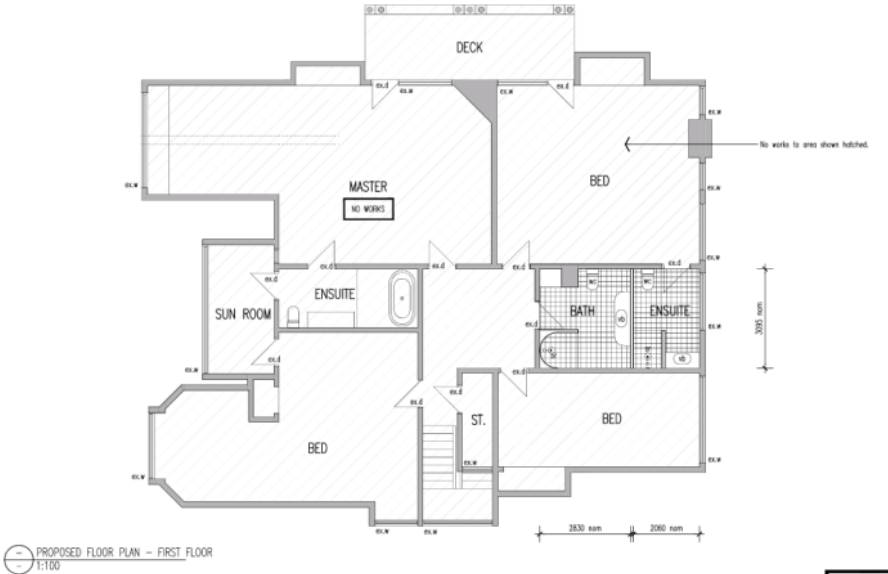
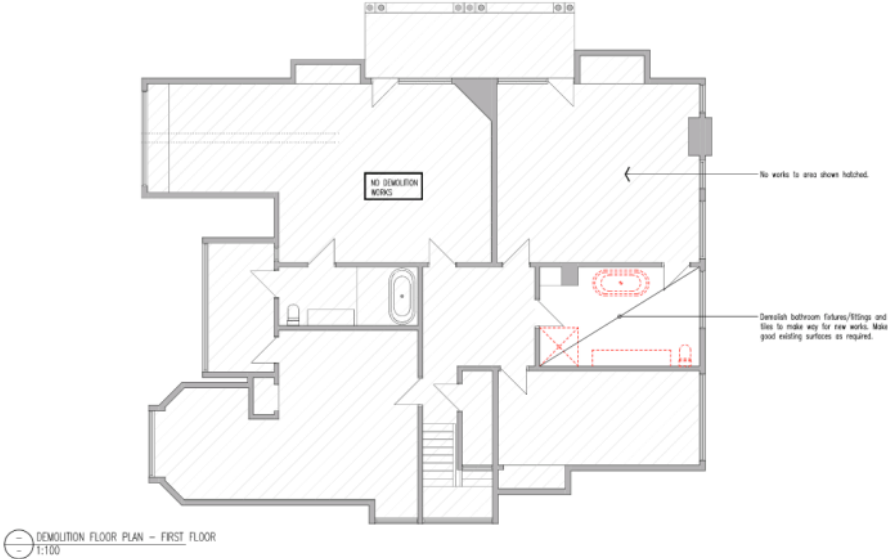
Project No 20080
Drawing Number A00-01

PRELIMINARY NOT FOR CONSTRUCTION









- DEMOLITION LEGEND**
- Demolition works denoted by red dashed line
- NOTES**
1. The contractor is to inspect the site, and become conversant with the limitations and constraints for access, noise, and general safety.
 2. All demolitions are to be removed from site unless noted otherwise. Strictly no burning off on site.
 3. Contractor to ensure all services are appropriately capped and sealed to make way for new work.
 4. Leave all surfaces clear and free of any rebar/objects ready to make way for new work.
 5. Builder to make the building secure throughout the building works.
 6. Provide temporary support to existing structure as required.
 7. All existing bricks and sand stone are to be retained, cleaned for reuse.

LOCATION OF ALL REMAINING STRUCTURES ARE INDICATED ONLY

Preston Lane

Hubert
40 Goodwin Street Hubert TAS 7008
T 61 8 9381 3953
AOC OCRTF
Hubert
3 Third Hand South Tiers VIC 3041
T 61 3 9571 8801
info@prestonlane.com.au
prestonlane.com.au

The Author/Contractor shall verify all dimensions to the work connecting, rigid, dimensions and taking modern to use solid work.

On the part of the drawing that is regulated or otherwise dealt with without the proper written consent of the Author.

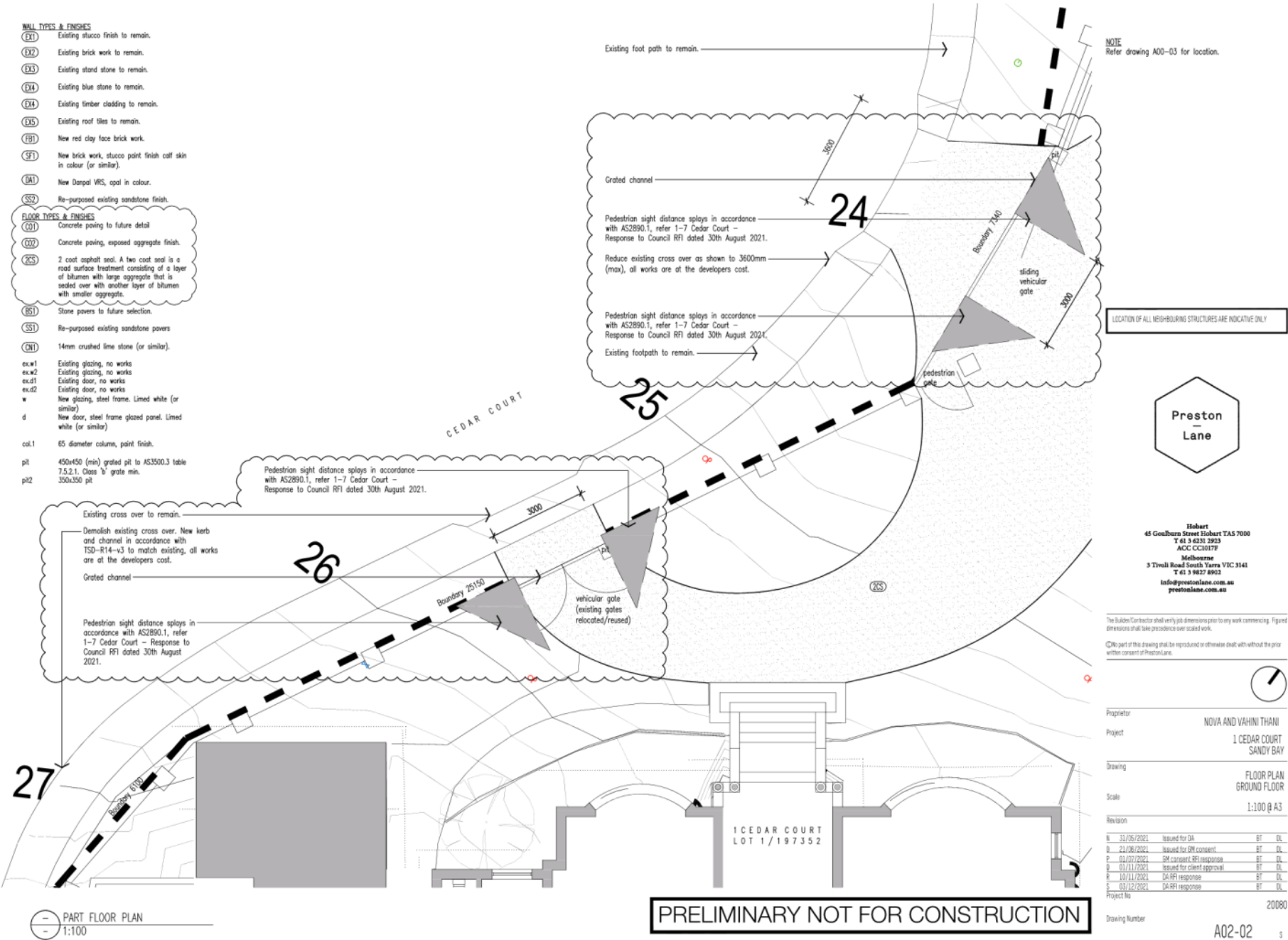
Register
Project: NOVA AND VIKING THRU
J CEDAR COURT SANDY BAY
Drawing: FLOOR PLAN FIRST FLOOR
Scale: 1:100 @ A2

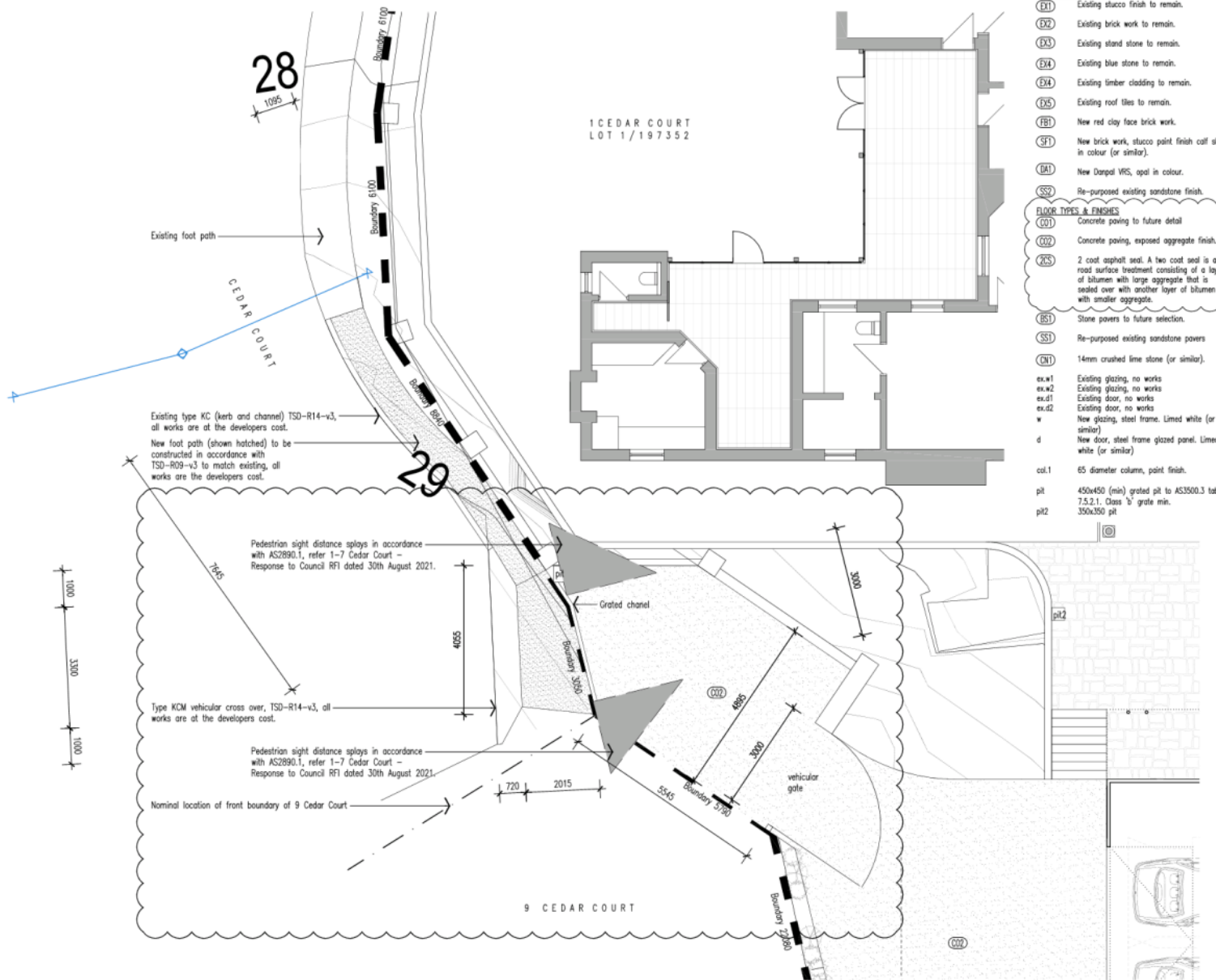
Revisions

R	21/01/2022	Issued for JG	BT	BL
P	21/01/2022	Issued for JG	BT	BL
C	21/01/2022	Issued for JG	BT	BL
E	21/01/2022	Issued for JG	BT	BL
F	21/01/2022	Issued for JG	BT	BL
G	21/01/2022	Issued for JG	BT	BL

Project No: 20080
Drawing Number: A02-01

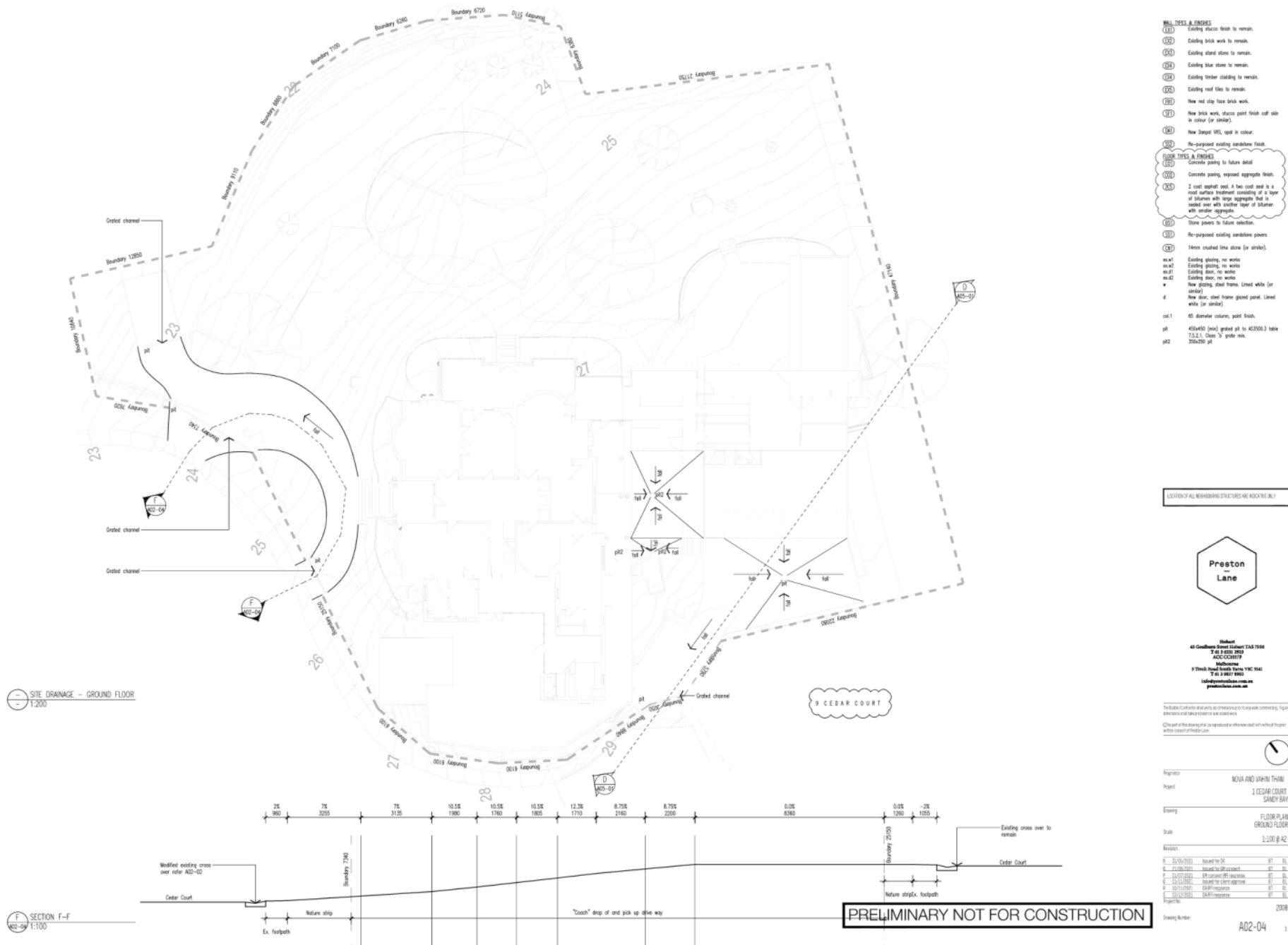
PRELIMINARY NOT FOR CONSTRUCTION





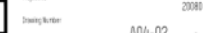
PART FLOOR PLAN
1:100

PRELIMINARY NOT FOR CONSTRUCTION





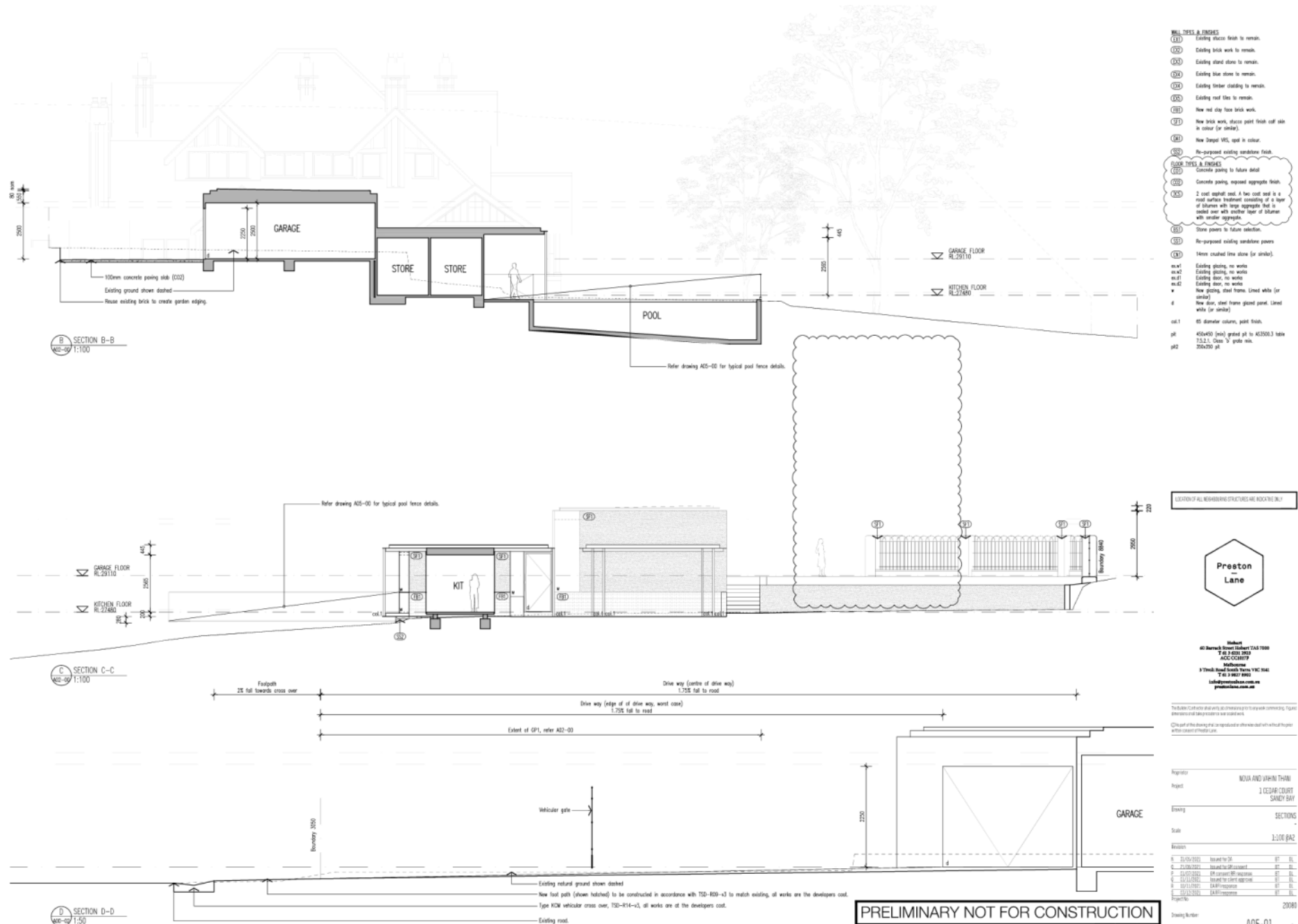




PRELIMINARY NOT FOR CONSTRUCTION







LEGEND
ex.j Existing joinery
ex.w Existing window
op Opaque window
ex.d Existing door

LOCATION OF ALL NEIGHBOURING STRUCTURES ARE INDICATIVE ONLY



Hobart
60 Barrack Street Hobart TAS 7000
T: 61 3 6333 3933
ACC CC10179
Melbourne
3 Throli Road South Yarra VIC 3141
T: 61 3 9637 8822
info@prestonlane.com.au
prestonlane.com.au

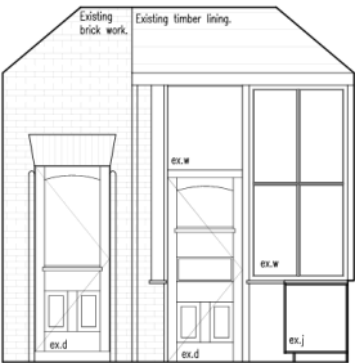
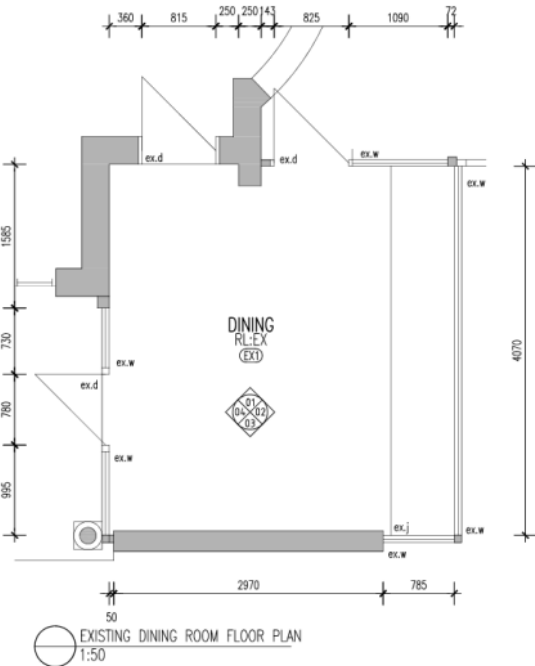
The Builder/Contractor shall verify all dimensions prior to any work commencing. Figure dimensions shall take precedence over scaled work.
No part of this drawing shall be reproduced or otherwise dealt with without the prior written consent of Preston Lane.

Proprietor NOVA AND VAHINI THANI
Project 1 CEDAR COURT SANDY BAY
Drawing INTERNAL ELEVATIONS
Scale 1:100 @ A3
Revision

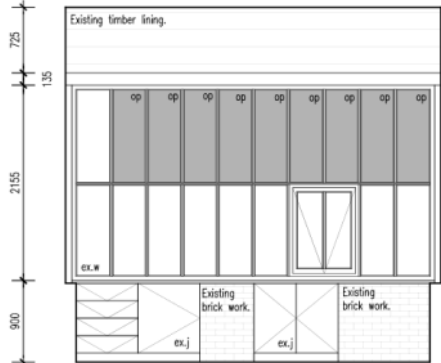
N	31/05/2021	Issued for DA	BT	DL
O	21/06/2021	Issued for PM consent	BT	DL
P	02/07/2021	3M Consent RT response	BT	DL
Q	03/11/2021	Issued for client approval	BT	DL
R	10/11/2021	DARFI response	BT	DL
S	03/12/2021	DARFI response	BT	DL

Project No 20080
Drawing Number A10-01

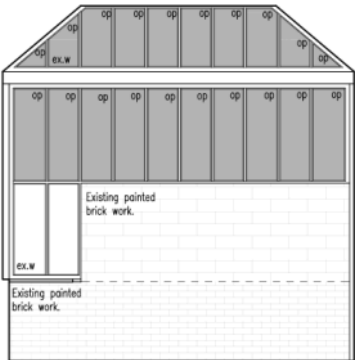
PRELIMINARY NOT FOR CONSTRUCTION



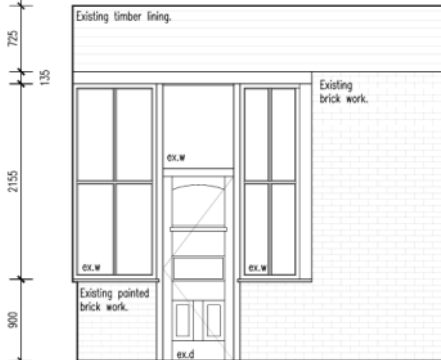
01 EXISTING INTERNAL ELEVATION 01
A10-01 1:50



02 EXISTING INTERNAL ELEVATION 02
A10-01 1:50



03 EXISTING INTERNAL ELEVATION 03
A10-01 1:50



04 EXISTING INTERNAL ELEVATION 04
A10-01 1:50

HYDRAULIC SERVICES DRAWINGS
NOVA AND VAHINI THANI
1 CEDAR COURT
SANDY BAY TAS 7005

H0.01	INDEX	A	01/11/2021
H0.02	ENGINEERING NOTES	A	01/11/2021
H0.03	WORKPLACE HEALTH & SAFETY NOTES	A	01/11/2021
H1.01	EXISTING SITE STORMWATER CATCHMENT	A	01/11/2021
H1.02	PROPOSED SITE STORMWATER CATCHMENT	A	01/11/2021
H2.01	SITE PLAN 1	A	01/11/2021
H2.02	SITE PLAN 2	A	01/11/2021
H3.01	DETENTION TANK CALCULATIONS	A	01/11/2021
H4.01	HYDRAULIC DETAILS	A	01/11/2021

			DRAWN: SL	 <div>ALDANMARK CONSULTING ENGINEERS <small>Lower Ground 199 Macquarie Street Hobart TAS 7000 03 6234 8666 mail@aldanmark.com.au www.aldanmark.com.au</small></div>	CLIENT: NOVA AND VAHINI THANI	PROJECT: ALTERATIONS AND ADDITIONS	SHEET: INDEX		
			CHECKED: TW		ADDRESS: 1 CEDAR COURT SANDY BAY TAS 7005	ISSUE: PLANNING APPROVAL	SCALE:	TOTAL SHEETS: 9	SIZE: A3
			DESIGN: SL						
			DESIGN CHECK: TW						
A	PLANNING APPROVAL	01/11/2021	CERTIFIER: TW				PROJECT No: 21E68-11	SHEET No: H0.01	REV No: A
REV	DESCRIPTION	DATE	APPROVAL						

HYDRAULIC SERVICES - GENERAL NOTES

GENERAL NOTES:

- THESE DRAWING ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS, PROJECT CONTRACT AND SPECIFICATIONS. STANDARDS REFERENCES ARE THE MOST RECENT VERSION.
- SEWER, STORMWATER AND WATER SERVICES SHALL BE IN ACCORDANCE WITH THE NCC VOL 3 (PCA), AS3500, WSA CODES, TASWATER AND TO LOCAL AUTHORITY APPROVAL.
- IT IS ASSUMED THAT ADJACENT TO THE DEVELOPMENT SITE IS ADEQUATE INFRASTRUCTURE PROVIDED BY THE LOCAL AUTHORITY AND OTHER STATUTORY AUTHORITIES TO SUPPLY ROAD ACCESS, WATER AND POWER AS REQUIRED BY THIS DESIGN, AND THERE IS ADEQUATE INFRASTRUCTURE OR ENVIRONMENTAL CAPACITY TO RECEIVE STORMWATER AND SEWERAGE DRAINAGE. PARTICULAR ASSUMPTIONS ARE DESCRIBED IN THE FOLLOWING SECTIONS.
- THE LOCATION OF EXISTING SERVICES AND CONNECTION POINTS WHERE SHOWN ON PLANS ARE APPROXIMATE ONLY AND SHALL BE CONFIRMED ON SITE.
- FOLLOWING AGREEMENT WITH THE SUPERINTENDANT, TERMINATE AND ABANDON REDUNDANT EXISTING SERVICES DISCOVERED DURING CONSTRUCTION AND MAKE A NOTE ON AS-CONSTRUCTED DRAWING.
- LOCATE ALL EXISTING GAS, ELECTRICAL, TELECOMMUNICATIONS, WATER MAINS, SEWER MAINS AND STORMWATER MAINS ETC. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND ADVISE THE SUPERINTENDANT OF ANYTHING THAT APPEARS NOT TO HAVE BEEN CONSIDERED IN THE DESIGN.
- CONFIRM ALL LEVELS ON SITE PRIOR TO THE COMMENCEMENT OF WORKS.
- HYDRAULIC LAYOUT TO BE COORDINATED WITH OTHER SERVICES. HYDRAULIC LAYOUT AS SHOWN IS NOTIONAL, LAYOUT TO BE CONFIRMED ON SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT A VALID BUILDING AND PLUMBING PERMIT AND START WORKS NOTICE IS IN PLACE FOR THE WORK AND THAT THE BUILDING SURVEYOR IS NOTIFIED OF ALL SITE INSPECTION REQUESTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES CAUSED BY HIS SUB-CONTRACTORS, ANY SERVICE DAMAGED IS TO BE REINSTATED IMMEDIATELY.
- ON COMPLETION OF WORKS PROVIDE THREE SETS OF AS-CONSTRUCTED DRAWINGS AND SERVICE MANUALS ALONG WITH ELECTRONIC DRAWING FILES IN PDF AND DWG FORMATS SUITABLE FOR READING WITH A RECENT VERSION OF ADOBEAUTOCAD TO THE SUPERINTENDANT.
- THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING ALL SITE INSPECTIONS AND OBSERVING ALL HOLD POINTS NOMINATED WITHIN THE CONTRACT, BY THE BUILDING SURVEYOR OR PLUMBING SURVEYOR.
- NOMINAL DIAMETERS FOR PIPES (DN) REFER TO THE INSIDE DIAMETER (ID BORE).
- CONCEAL ALL PIPEWORK IN CEILING SPACE, DUCTS, CAVITIES, WALL CHASES, CUPBOARDS ETC. UNLESS OTHERWISE APPROVED.
- THE CONTRACTOR SHALL ALLOW TO COORDINATE WITH MECHANICAL AND REFRIGERATION SERVICES AND PROVIDE TUNISHES CONNECTED TO SEWER OR STORMWATER AS APPROPRIATE TO ALL CONDENSATE DRAINAGE AND RELIEF VALVES. ALLOW TO PROVIDE AND INSTALL MAG IN-WALL TUNISHES WITH STAINLESS STEEL COVER WINDOW (SUPPLIED BY K&A GRIFFITH) OR EQUAL APPROVED TYPE.
- TRENCHING FOR FLEXIBLE PIPEWORK SHALL BE IN ACCORDANCE WITH AS2596 AND AS3500.
- ALL PIPEWORK UNDER TRAFFICABLE AREAS, SLABS OR PAVEMENTS IS TO BE FULLY BACKFILLED WITH COMPACTED FCR.

STORMWATER NOTES:

- STORMWATER PIPE INFRASTRUCTURE HAS BEEN DESIGNED TO CONVEY A 20 YEAR ANNUAL EXCEEDANCE POSSIBILITY (5% AEP) AT A 5 MINUTE STORM DURATION, WITH OVERLAND FLOW PATHS PROVIDED FOR 1:100 YEAR ANNUAL EXCEEDANCE PROBABILITY (1% AEP). IT IS ASSUMED THAT THE DOWNSTREAM INFRASTRUCTURE AND/OR ENVIRONMENT CAN SAFELY RECEIVE THE 5% AEP EVENT WITH A 5 MINUTE STORM DURATION.
- ALL MATERIALS AND WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH AS3500, NCC VOL 3 (PCA), COUNCIL STANDARD DRAWINGS AND SPECIFICATION AND TO THE SATISFACTION OF COUNCIL'S DEVELOPMENT ENGINEER.
- ALL PIPEWORK SHALL BE MINIMUM DN100 DWV SNE AT 1:100 GRADE (1.00%) UNLESS NOMINATED OTHERWISE ON PLANS.
- MINIMUM GRADE OF PAVED AREAS AND PIPEWORK SHALL BE 1 IN 100 UNLESS NOTED OTHERWISE.
- INSTALL ALL AG DRAINS TO THE REQUIREMENTS OF AS3500 AND THE NCC.
- PROVIDE INSPECTION OPENINGS TO ALL DRAINAGE PIPEWORK IN ACCORDANCE WITH AS3500 REQUIREMENTS EVEN IF NOT SHOWN IN DRAWINGS.
- PIPE AND CHANNEL INFRASTRUCTURE HAS BEEN DESIGNED TO CONVEY 20 YEAR ANNUAL EXCEEDANCE POSSIBILITY (5% AEP) STORMS, WITH OVERLAND FLOW PATHS PROVIDED FOR 1% AEP STORMS. IT IS ASSUMED THAT WATER FLOWING ONTO THE DEVELOPMENT SITE IS CONTAINED WITHIN LOCAL AUTHORITY INFRASTRUCTURE FOR 5% AEP STORMS AND THE ROAD RESERVE FOR 1% AEP STORMS.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY'S BY-LAWS AND AS/NZS3500.
- STORMWATER TRENCHES, PIPE BEDDING AND BACK FILLING TO COMPLY WITH THE CONCRETE PIPE ASSOCIATION OF AUSTRALIA INSTALLATION REQUIREMENTS FOR TYPE HS2 SUPPORT.
- BELOW GROUND PIPEWORK AND FITTINGS TO BE DWV SNE, JOINTS SHALL BE OF SOLVENT CEMENT TYPE OR FLEXIBLE JOINTS MADE WITH APPROVED RUBBER RINGS.
- PIPEWORK SHALL BE LAID IN POSITION AND AT THE GRADES SHOWN.
- MINIMUM GRADE OF PIPEWORK SHALL BE 1 IN 100 UNLESS NOTED OTHERWISE (U.N.O.).
- MINIMUM SIZE OF PIPEWORK SHALL BE DN100.
- SURFACE WATER DRAINS, CATCHPITS/GRATED PITS, AND JUNCTION BOXES SHALL BE CONSTRUCTED AS DETAILED OR AS SPECIFIED BY THE MANUFACTURER.
- ALL MANHOLES TO BE LOCATED CLEAR OF FUTURE FENCE LINES.

SEWER NOTES:

- ALL MATERIALS AND WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH AS3500, NCC VOL 3 (PCA), TASMANIAN APPENDIX OF THE NCC VOL 3 (PCA), COUNCIL STANDARD DRAWINGS AND SPECIFICATION AND TO THE SATISFACTION OF COUNCIL'S DEVELOPMENT ENGINEER.
- CONFIRM THE LOCATION AND LEVEL OF THE NOMINATED OUTLET PRIOR TO TRENCH EXCAVATION OR LAYING OF ANY DRAINS. ASCERTAIN FROM TASWATER ALL NECESSARY CONNECTION REQUIREMENTS AND INSTALL ALL WORK FOR CONNECTION IN ACCORDANCE WITH THESE REQUIREMENTS.
- SEWER TRENCHES, PIPE BEDDING AND BACK FILLING TO COMPLY WITH AS2596 & AS3500 2.
- ALL PIPEWORK SHALL BE ADEQUATELY SUPPORTED TO AS3500.
- PIPEWORK SHALL BE CONSTRUCTED OF DWV SNE U.N.O. PIPEWORK RECEIVING HOT DISCHARGES SHALL BE CONSTRUCTED OF HIGH DENSITY POLYETHYLENE (HDPE) OR COPPER TYPE 'B'.
- PIPEWORK SHALL HAVE BE MINIMUM CLASS SNE UNLESS NOMINATED OTHERWISE ON PLANS.
- PIPEWORK SHALL BE PRESSURE TESTED PROGRESSIVELY TO ENSURE NO LEAKS.
- ALL PIPEWORK SHALL BE CONCEALED IN WALLS, VOID SPACE OR DUCTS UNLESS NOTED OTHERWISE.
- MINIMUM GRADE OF PIPEWORK SHALL BE 1:40 FOR BRANCHES AND 1 IN 50 FOR DRAINS UNLESS NOTED OTHERWISE.
- MINIMUM SIZE OF BRANCH DNE5 AND MINIMUM SIZE OF DRAINS SHALL BE DN100.
- WHERE FLOOR WASTE GULLIES ARE INDICATED, THE FLOORS SHALL BE GRADED TOWARDS THE OUTLET FLOOR WASTE GULLIES CONNECTED TO LAUNDRY FIXTURES SHALL BE ANTI-FODM TYPE.
- ALL FITTINGS TO BE ISOLATED BY AN APPROVED TRAP PRIOR TO CONNECTION TO THE SEWER LINE.
- PROVIDE AIR ADMITTANCE VALVES AND ATMOSPHERIC VENTS IN ACCORDANCE WITH AS3500 REQUIREMENTS.
- INSPECTION OPENINGS SHALL BE PROVIDED IN ACCORDANCE WITH AS3500.
- ONE OVERFLOW RELIEF GULLY SHALL BE PROVIDED FOR THE SITE WHICH SHALL BE PRIMED BY AN EXTERNAL WATER SOURCE.
- WHERE PIPEWORK PENETRATES FIRE RATED WALLS OR FLOORS, A FIRE STOP COLLAR SHALL BE INSTALLED. ALL WORK SHALL BE STRICTLY INSTALLED TO THE MANUFACTURER'S RECOMMENDATIONS.
- NO SEWER CONNECTIONS SHALL BE MADE WITHIN RESTRICTED ZONES OF STACKS AS PER AS3500. INSTALL LONG RADIUS BENDS AT THE BASE OF ALL STACKS AS PER AS3500 AND INCLUDE ALL BRACKETS AND SUPPORTS.

WATER NOTES:

- WATER SERVICES TO BE CONSTRUCTED IN ACCORDANCE WITH AS3500 PARTS 1 AND 4 AND TO THE SATISFACTION OF COUNCILS (OR TAS WATER FOR EXTERNAL DEVELOPMENT ENGINEER).
- ALL CONNECTIONS TO EXISTING MAINS TO BE CARRIED OUT BY TASWATER AT CONTRACTORS COST UNLESS NOMINATED OTHERWISE ON PLANS.
- GENERAL MATERIALS, INSTALLATION & TESTING SHALL COMPLY WITH AS3500 PARTS 1 AND 4.
- ALL COPPER PIPEWORK SHALL BE HARD DRAWN TUBING TYPE 'B' CONFORMING TO AS 1432.
- AS AN ALTERNATIVE TO SILVER SOLDERED JOINTS, PRESS FITTED JOINTS MAY BE USED. ALLOW TO USE THE VIEGA PROGRESS SYSTEM WITH INSTALLATION IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND SPECIFICATIONS.
- ALL PIPEWORK SHALL BE CONCEALED WHERE POSSIBLE. WHERE PIPEWORK IS EXPOSED IT SHALL BE CHROME PLATED.
- WHERE PIPEWORK IS IN CONTACT WITH DISSIMILAR METALS, THE METALS SHALL BE INSULATED AGAINST BI-METAL CORROSION.
- MINIMUM COVER TO BE 750mm UNDER TRAFFICABLE AREAS, 600mm ELSEWHERE UNLESS NOMINATED OTHERWISE ON PLANS.
- PROVIDE STOP VALVES AT ALL BRANCH OFFTAKES.
- ALL TRENCHES UNDER TRAFFICABLE AREAS, INCLUDING DRIVEWAYS, TO BE BACKFILLED WITH COMPACTED FCR.
- ELECTROMAGNETIC TRACKING TAPE TO BE PLACED OVER ALL TRENCHES CONTAINING WATER PIPES 500+ OR GREATER ABOVE HAUNCHING.
- ALL ISOLATION VALVES SHALL BE POSITIONED IN APPROVED ACCESSIBLE LOCATIONS. VALVES LOCATED IN DUCTS OR WALLS SHALL BE POSITIONED BEHIND APPROVED TYPE ACCESS COVERS.
- ALL SLOTTED STOP VALVES SHALL HAVE UNION COUPLINGS AND BE ACCESSIBLE. GROUP VALVES WHEREVER POSSIBLE.
- ALL COPPER PIPEWORK SHALL BE HARD DRAWN TUBING TYPE 'B' CONFORMING TO AS 1432.
- ALL POLYETHYLENE PIPEWORK SHALL BE PN16 PE100 CONFORMING TO AS 4130.
- THRUST BLOCKS SHALL BE INSTALLED AS REQUIRED BY WSA AND AS3500.
- HOT WATER TO BE STORED AT MINIMUM 60°C WITH TEMPERING DEVICE INSTALLED TO LIMIT OUTLET TEMPERATURE TO 50°C TO ABUTION AREAS, 60°C TO KITCHEN SINK, CLEANERS SINK AND LAUNDRY TROUGH AND TEMPERED TO 45°C WITH THERMOSTATIC MIXING VALVES IN DISABLED, CHILD CARE AND AGED CARE FACILITIES.
- TEMPERED, COLD WATER, HOT WATER PIPEWORK AND VALVES SHALL BE LAGGED AS PER AS/NZS 3500 4:2018 SECTION 8 FOR CLIMATE REGION B. HOT WATER CIRCULATING LINE TO BE LAGGED WITH SECTIONAL ROCKWOOL WITH FOIL OUTER COVER. EXTERNAL LAGGING TO BE UV PROTECTED, AND LAGGING EXPOSED TO MOISTURE NEEDS TO BE MOISTURE PROTECTED. SOLAR FLOW AND RETURN LAGGING SHOULD BE RATED FOR TEMPERATURES UP TO 150°C, OTHER LAGGING RATED TO 105°C. ALL LAGGING SHOULD BE FIRE RATED TO NCC REQUIREMENTS, PVC FREE, ZERO OZONE DEPLETING POTENTIAL, LOW VOLATILE ORGANIC COMPOUNDS.
- ONE PRESSURE RELIEF VALVE SET TO 500 KPA SHALL BE PROVIDED TO ALL WATER PIPES AT THE POINT OF ENTRY INTO A BUILDING.
- HOSE BIB COCKS SHALL BE 600mm ABOVE FINISHED SURFACE LEVEL AND SHALL BE 20mm IN SIZE. U.N.O. AND FITTED WITH APPROVED VACUUM BREAKERS. THE PLUMBER SHALL ARRANGE FOR ALL INSPECTIONS AND TESTING OF SERVICES REQUIRED BY THE LOCAL AUTHORITY PRIOR TO CONCEALMENT. PRESSURE TEST HOT AND COLD WATER SERVICES TO 1.5 TIMES NORMAL WORKING PRESSURE AND FIRE SERVICES TO 1700 KPA MINIMUM PRESSURE PRIOR TO CONNECTION TO EXISTING SERVICES. PUMP EQUIPMENT SHALL BE REMOVED WHILST TESTING IS CARRIED OUT.
- ALL TEMPERING AND THERMOSTATIC MIXING VALVES SHALL BE EASILY LOCATED FOR SAFE OHS ACCESS.
- FOLLOWING COMPLETION OF THE WORKS, FLUSH ALL PIPING SYSTEMS AND LEAVE FREE OF FOREIGN MATTER, CLEAN OUT AERATORS, STRAINERS, FILTERS, ETC., FLOW AND PRESSURE TEST ALL HYDRANTS AND HOSE REELS.

BUILDING HYDRAULICS:

- ALL MATERIALS AND WORKMANSHIP TO BE DONE IN ACCORDANCE WITH AS3500, NCC VOL 3 (PCA), TASMANIAN APPENDIX OF THE NCC VOL 3 (PCA) AND LOCAL AUTHORITY REQUIREMENTS.
- ALL DRAINAGE PIPEWORK SHALL BE DWV CLASS SNE U.N.O. ALL WASTE AND VENT SHALL BE DWV CLASS PIPE.
- DURING CONSTRUCTION TEMPORARILY SEAL ALL OPEN ENDS OF PIPES AND VALVES TO PREVENT ENTRY OF FOREIGN MATTER, DO NOT USE RAGS, PAPER OR WOODEN PLUGS.
- SUPPLY AND INSTALL ALL FIXTURES, VALVES, TAPWARE AND SUNDRY ITEMS AS SCHEDULED WITHIN THE SPECIFICATION.
- PROVIDE FIRE STOPS AS REQUIRED.
- CONTRACT DRAWINGS ARE DIAGRAMMATIC AND AS SUCH SHOW THE INTENT OF DESIGN. INSTALLATION TO BE AS PER AS/NZS3500. ALLOW FOR ALL BENDS, OFFSETS AND OTHER MEASURES AS NECESSARY TO AVOID INTERFERENCE WITH THE STRUCTURE AND/OR OTHER BUILDING SERVICES.
- REFER TO ARCHITECT'S DEMOLITION PLAN FOR REMOVAL OF EXISTING FIXTURES AND FITTINGS. THE REMOVAL OF EXISTING PLUMBING FIXTURES SHALL INCLUDE ALL ASSOCIATED WASTE AND VENT PIPES, FLOOR DRAINS, WATER SERVICE PIPEWORK BRACKETS, SUPPORTS, ETC. AND SEAL OFF EXISTING SERVICES. SEAL OFF AND MAKE GOOD ALL FLOOR, WALL AND ROOF PENETRATIONS.
- THE LOCATION OF EXISTING SERVICES WHERE SHOWN ARE APPROXIMATE ONLY AND SHALL BE CONFIRMED ON SITE. WHERE POSSIBLE, DETERMINE LOCATION OF EXISTING POWER, TELSTRA, WATER AND DRAINAGE SERVICES PRIOR TO COMMENCING NEW WORK.
- ALL PENETRATIONS THROUGH EXISTING SUSPENDED FLOOR SLABS SHALL BE DRILLED TO LOCATIONS APPROVED BY THE STRUCTURAL ENGINEER. DRILL PILOT HOLE PRIOR TO CORE DRILLING TO ENSURE CLEARANCE OF BEAMS AND OTHER SERVICES IN SLAB. ALL PENETRATIONS SHALL BE CORE DRILLED TO SUIT PIPE SIZE. ALLOWANCE FOR 10 MM CLEARANCES SHALL BE MADE FOR FIRE PROOFING.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE AND SMOKE STOP WALLS. ALL PIPE PENETRATIONS SHALL BE SEALED WITH TWO HOUR FIRE STOP SEALANT. INSTALL FIRE STOP COLLARS TO PVC-U OR DWV PIPEWORK PASSING THROUGH FLOORS AND FIRE WALLS IN ACCORDANCE WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS.
- PROVIDE SERVICE IDENTIFICATION AND DIRECTION OF FLOW MARKERS TO PIPEWORK IN ACCORDANCE WITH AS1345.
- MAKE GOOD ALL DISTURBED SURFACES TO MATCH EXISTING.
- MAINTAIN SERVICES TO EXISTING FIXTURES AT ALL TIMES. WHERE CHANGEOVER IS REQUIRED, LIAISE WITH THE ARCHITECT PRIOR TO THE SHUTTING DOWN OF ANY SERVICE.
- CONTRACTOR TO PROVIDE ALL DOCUMENTS, APPROVALS, CERTIFICATES, WARRANTIES, LOG BOOKS, ETC. UPON COMPLETION OF WORKS TO THE ARCHITECT. ALL FEES AND INSPECTIONS TO BE INCLUDED AND ARRANGED BY THE CONTRACTOR.
- REFER TO THE ARCHITECT'S DRAWINGS FOR SANITARY FIXTURE AND TAP SELECTIONS. SUPPLY AND FIX ACCESSORIES NECESSARY FOR THE CORRECT INSTALLATION OF THE FIXTURES AND EQUIPMENT.

TASWATER NOTES:

- ALL WORKS OUTSIDE OF THE PROPERTY BOUNDARY WILL BECOME TASWATER ASSETS.
- ENSURE ALL WORKS ARE INSTALLED IN ACCORDANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS NOTED WITHIN THE DRAWINGS AND ISSUED PERMITS.
- ALLOW TO ORGANISE ALL APPLICATIONS TO UNDERTAKE TASWATER WORKS AS NOTED IN THE APPROVAL. DOCUMENTS AND UNDERTAKE ALL REQUIRED INSPECTIONS DURING CONSTRUCTION.
- ALL WORKS ASSOCIATED WITH PUBLIC SEWER AND WATER IS TO BE CARRIED OUT IN ACCORDANCE WITH THE WSA PARTS 02 & 03 (WATER AND SEWERAGE CODES OF AUSTRALIA) AND TO THE SATISFACTION OF TASWATER.
- ALL CONNECTIONS TO EXISTING MAINS TO BE CARRIED OUT BY THE REGULATING AUTHORITY AT COST TO BUILDER UNLESS APPROVED OTHERWISE.

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WORKPLACE HEALTH AND SAFETY NOTES

GENERAL

- THE FOLLOWING RISK MITIGATION NOTES HAVE BEEN PREPARED TO ADVISE THE PERSON CONDUCTING A BUSINESS OR UNDERTAKING (POBU) ON THE HEALTH AND SAFETY ASPECTS OF THE DESIGN IN ACCORDANCE WITH THE WORK HEALTH AND SAFETY ACT 2011 AND ARE PERTINENT TO ANY TIME WHEN THE BUILDING OPERATES AS A WORKPLACE.
- THESE NOTES MAY NOT NECESSARILY ACCOUNT FOR ALL CONSTRUCTION, OPERATION, MAINTENANCE AND DEMOLITION PRACTICES AND SAFETY RISKS. INCLUSION OR EXCLUSION OF ANY ITEM DOES NOT RESOLVE THE OWNER, CONTRACTOR, USER, MAINTAINER OR DEMOLISHER OF THEIR OBLIGATIONS TO UNDERTAKE APPROPRIATE RISK MANAGEMENT ACTIVITIES AND IT IS NOT AN ADMISION THAT ANY ITEM BELOW IS THE RESPONSIBILITY OF ALDAMARK.
- ADDITIONAL GUIDANCE ON WORKPLACE HEALTH AND SAFETY IS PROVIDED IN THE FOLLOWING CODES OF PRACTICE, WHICH THE CONTRACTOR IS TO COMPLY WITH AS APPLICABLE:
 - 'CONSTRUCTION WORK' (CP104);
 - 'HOW TO MANAGE WORK HEALTH AND SAFETY RISKS' (CP112);
 - 'MANAGING THE WORK ENVIRONMENT AND FACILITIES' (CP124);
 - 'SAFE DESIGN OF STRUCTURES' (CP127).
- FURTHER ADDITIONAL AND UPDATED CODES OF PRACTICE AND OTHER GUIDANCE MATERIALS FOR THE MINIMISATION OF RISKS TO WORKPLACE HEALTH AND SAFETY ARE MADE AVAILABLE PERIODICALLY FROM WORKSAFE TASMANIA AT WWW.WORKSAFE.TAS.GOV.AU AND SAFE WORK AUSTRALIA AT WWW.SAFEWORKEAUSTRALIA.GOV.AU AND SHOULD BE CONSULTED PRIOR TO WORKS COMMENCING ON SITE.
- WHERE APPLICABLE, THE SPECIFIC RISKS ASSOCIATED WITH THIS PROJECT HAVE BEEN ASSESSED AND ARE SUMMARISED IN THE ATTACHED RISK ASSESSMENT / HAZARD IDENTIFICATION REPORT.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ALL ASSOCIATED RISKS OF THE CONSTRUCTION PROCESS AND TO PREPARE ADEQUATE SAFE WORK METHOD STATEMENTS AND JOB SAFETY ANALYSIS.
- TEMPORARY STRUCTURES AND CONTRACTOR ERECTION PROCEDURES ARE ONLY INDICATED WHERE ESSENTIAL TO THE EXECUTION OF THE DESIGN AS INTENDED IN THE DOCUMENTS PROVIDED. DETAILLED PROCEDURES MUST BE SOUGHT PRIOR TO WORKS COMMENCING. FOR ALL ASSOCIATED TEMPORARY STRUCTURE OR ERECTION DESIGN AND CERTIFICATION THE CONTRACTOR IS TO ENGAGE A THIRD PARTY TO ASSIST, CERTIFY AND OVERSEE THE ERECTION OF THE WORKS.

SITE

- RUPTURE OF SERVICES DURING EXCAVATION FOR OTHER ACTIVITY CREATES A VARIETY OF RISKS INCLUDING RELEASE OF HAZARDOUS MATERIAL. EXISTING SERVICES MAY BE LOCATED ON OR AROUND THE BUILDING SITE. WHERE KNOWN, THESE ARE IDENTIFIED ON THE DRAWINGS. HOWEVER THE EXACT LOCATION AND EXTENT OF SERVICES MAY VARY FROM THAT INDICATED. SERVICES SHOULD BE LOCATED USING AN APPROPRIATE SERVICE APPROPRIATE EXCAVATION PRACTICE SHOULD BE USED AND, WHERE NECESSARY, SPECIALIST CONTRACTORS SHOULD BE ENGAGED.

SITE ACCESS / TRAFFIC MANAGEMENT

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE: 'TRAFFIC MANAGEMENT IN WORKPLACES' STANDARD CONTROL.
- ESPECIALLY FOR BUILDINGS ON A MAJOR, NARROW, OR STEEPLY INCLINED ROAD. PARKING OF VEHICLES OR LOADING / UNLOADING OF VEHICLES ON THE ROADWAY MAY CAUSE A TRAFFIC HAZARD. DURING CONSTRUCTION, MAINTENANCE OR DEMOLITION OF THE BUILDING, DESIGNATED PARKING FOR WORKERS AND LOADING AREAS SHOULD BE PROVIDED. FOR ALL BUILDINGS A TRAFFIC MANAGEMENT PLAN SUPERVISED BY TRAINED TRAFFIC MANAGEMENT PERSONNEL SHOULD BE IMPLEMENTED FOR THE WORK SITE.
- PUBLIC ACCESS TO CONSTRUCTION AND DEMOLITION SITES AND TO AREAS UNDER MAINTENANCE CAUSES RISK TO WORKERS AND THE PUBLIC. WARNING SIGNS AND SECURE BARRIERS TO UNAUTHORISED ACCESS SHOULD BE PROVIDED WHERE ELECTRICAL INSTALLATIONS, EXCAVATIONS, PLANT OR LOOSE MATERIALS ARE PRESENT. THEY SHOULD BE SECURED WHEN NOT FULLY SUPERVISED.
- BUILDING OWNERS AND OCCUPERS SHOULD MONITOR THE PEDESTRIAN ACCESS WAYS AND, IN PARTICULAR, ACCESS TO AREAS WHERE MAINTENANCE IS ROUTINELY CARRIED OUT, TO ENSURE THAT SURFACES HAVE NOT MOVED OR CRACKED SUCH THAT THEY BECOME UNEVEN AND PRESENT A TRIP HAZARD. SPILLS, LOOSE MATERIAL, STRAY OBJECTS OR ANY OTHER MATTER THAT MAY CAUSE A SLIP OR TRIP HAZARD SHOULD BE CLEANED OR REMOVED FROM ACCESS WAYS.
- CONTRACTORS SHOULD BE REQUIRED TO MAINTAIN A Tidy WORK SITE DURING CONSTRUCTION, MAINTENANCE OR DEMOLITION TO REDUCE RISK OF TRIPS AND FALLS IN THE WORKPLACE. MATERIALS FOR CONSTRUCTION OR MAINTENANCE SHOULD BE STORED IN DESIGNATED AREAS AWAY FROM ACCESS WAYS AND WORK AREAS.
- CONSTRUCTION OF BUILDING ELEMENTS THAT ARE NECESSARY TO CONTRIBUTE TO SAFE ACCESS TO THE BUILDING, SUCH AS HANDRAILS, SCAFFOLDING, ACCESS STAIRS, FALL ARREST SYSTEMS ETC., MUST TAKE PLACE PRIOR TO PROGRESSING WITH ANY OTHER WORKS FOR WHICH THOSE ELEMENTS WILL BE REQUIRED.

WATER

- IF THE BUILDING SITE IS ADJACENT TO ANY BODY OF WATER ADEQUATE PROTECTION AND ACCESS PREVENTION SHALL BE PROVIDED. THE CONTRACTOR IS TO PREPARE A SAFE WORK METHOD STATEMENT FOR ANY WORKS REQUIRED TO BE UNDERTAKEN OVER WATER.

LIGHTING AND VENTILATION

- THE CONTRACTOR IS TO PROVIDE ADEQUATE LIGHTING AND VENTILATION TO ALL AREAS REQUIRED TO BE OCCUPIED BY WORKERS DURING CONSTRUCTION. PRIOR TO THE COMMISSIONING OF THE BUILDING, FAN LIGHTING AND VENTILATION MUST BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE B.C.A.

FIRE AND EMERGENCY

- ADEQUATE SITE SPECIFIC FIRE EQUIPMENT AND EMERGENCY EVACUATION PROCEDURES ARE TO BE PROVIDED AND MAINTAINED BY THE CONTRACTOR DURING WORKS ON SITE ACCORDING TO A SAFE WORK METHOD STATEMENT TO BE PREPARED BY THE CONTRACTOR PRIOR TO WORKS COMMENCING ON SITE. PRIOR TO THE COMMISSIONING OF THE BUILDING, FAN FIRE PROTECTION EQUIPMENT SHALL BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE B.C.A.

ELECTRICAL

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODES OF PRACTICE: 'WORKING IN THE VICINITY OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES' AND 'MANAGING ELECTRICAL RISKS IN THE WORKPLACE' (CP117) AND AS 3012 STANDARD CONTROLS.
- UNDERGROUND POWER LINES MAY BE LOCATED IN OR AROUND THE SITE. ALL UNDERGROUND POWER LINES MUST BE ACCURATELY LOCATED AND EITHER DISCONNECTED OR ADEQUATE EXCLUSION ZONES DELINEATED PRIOR TO ANY CONSTRUCTION, MAINTENANCE OR DEMOLITION WORK COMMENCING.
- OVERHEAD POWER LINES MAY BE LOCATED ON OR NEAR THE SITE. THESE POSE A SIGNIFICANT RISK IF STRUCK OR APPROACHED BY LIFTING DEVICES OR OTHER PLANT AND PERSONS WORKING ABOVE GROUND LEVEL WHERE THERE IS A DANGER OF THIS OCCURRING. POWER LINES SHOULD BE, WHERE PRACTICAL, DISCONNECTED OR RELOCATED. IF NOT PRACTICAL, CLEARLY IDENTIFIED EXCLUSION ZONES AND APPROACH DISTANCES SHALL BE ESTABLISHED AND MAINTAINED.

EXCAVATION

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE: 'EXCAVATION WORK' (CP107) STANDARD CONTROL.
- CONSTRUCTION OF THE BUILDING AND SOME MAINTENANCE ON THE BUILDING MAY REQUIRE EXCAVATION AND INSTALLATION OF ITEMS WITHIN THE EXCAVATION. WHERE PRACTICAL, INSTALLATION SHOULD BE CARRIED OUT USING METHODS THAT DO NOT REQUIRE WORKERS TO ENTER THE EXCAVATION. WHERE THIS IS NOT PRACTICAL, ADEQUATE SUPPORT FOR THE EXCAVATED AREA SHALL BE PROVIDED TO PREVENT COLLAPSE. WARNING SIGNS AND BARRIERS TO PREVENT ACCIDENTAL OR UNAUTHORISED ACCESS TO ALL EXCAVATIONS SHALL BE PROVIDED.
- ANY AQUIRING PROCEDURES MAY CAUSE A RISK OF FALLING INTO OPEN BORIES. ALL BORIES THEREFORE ARE TO BE CONSIDERED FILLED AS SOON AS POSSIBLE. IN THE MEANTIME, ADEQUATE PROTECTION AND ACCESS PREVENTION SHALL BE PROVIDED.
- THE CONTRACTOR IS TO CONSULT ANY SITE INVESTIGATION REPORTS ETC. BEFORE CONDUCTING ANY EXCAVATION WORKS. IN THE CASE OF ANY AREAS BEING IDENTIFIED AS HAVING GROUND CONTAMINANTS PRESENT, A QUALIFIED SPECIALIST CONSULTANT SHALL BE ENGAGED TO PROVIDE REMEDIAL WORKS DESIGN AND RISK MITIGATION STRATEGIES.

CONSTRUCTION

FORMWORK

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE: 'FORMWORK AND FALSEWORK' STANDARD CONTROL.
- ALL FORMWORK AND SUPPORTING SCAFFOLD STRUCTURES MUST BE DESIGNED TO CARRY THE CONSTRUCTION LOADING SPECIFIED WITH THIS SET OF DOCUMENTATION.
- INSTR. FORMWORK (EG. KRONER) / CONCRETE MUST BE INSTALLED TO MANUFACTURERS INSTRUCTIONS AND SUPPORTED DURING CONSTRUCTION AS RECOMMENDED. TEMPORARY SUPPORTS ARE NOT PROVIDED AS PART OF THIS DOCUMENTATION.
- SLABS THAT SUPPORT CONTINUED TEMPORARY STRUCTURE MUST BE BACK PROPPED. BACK PROPPING MUST BE CHECKED AND APPROVED PRIOR TO ANY ADDITIONAL CONSTRUCTION LOADING.
- WALLS, COLUMN AND OTHER VERTICAL FORMWORK MUST BE CHECKED AND DESIGNED FOR POTENTIAL HYDROSTATIC LOADING DURING CONCRETE PLACEMENT.

PRECAST PANEL ERECTION

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE: 'PRECAST TILT UP AND CONCRETE ELEMENTS IN BUILDING CONSTRUCTION' AND AS 1580 STANDARD CONTROLS.
- CONTRACTOR IS TO ENSURE THAT CRANE SIZE AND LOCATION IS ADEQUATELY ASSESSED FOR CAPACITY BEFORE PANELS ARE ERECTED. THIS IT TO INCLUDE BUT IS NOT LIMITED TO CRANE SUPPORT BEARING, LOCATION OF UNDERGROUND SERVICES, OVERTURNING, LIFTING CAPACITY, OVERHEAD OBSTRUCTIONS AND TRAFFIC HAZARDS.
- CHAIN AND SLING SETUP FOR PANELS IS TO BE CHECKED AGAINST APPROVED PANEL LIFTING POINTS. WHERE APPROPRIATE AN APPROVED SPREADER BEAM IS TO BE USED.
- PATHWAYS OF OVERHEAD TRAVEL OF PANELS ARE TO BE CLEARLY MARKED AND ACCESS TO THESE RESTRICTED DURING LIFTING.
- PANEL BEARING AND LOCATING PLATES AND DOWELS ARE TO BE CHECKED FOR FINAL LOCATION.
- PANEL PROPPING AND TEMPORARY SUPPORT MUST BE LOCATED WITH APPROVED ANCHORS AND APPROPRIATE CHECKS AND DESIGNS FOR CAPACITY, NUMBER AND CONFIGURATION OF PROPS IS TO BE CONDUCTED PRIOR TO ERECTION. TEMPORARY SUPPORTING STRUCTURE DURING CONSTRUCTION IS NOT PROVIDED AS PART OF THESE DESIGN DOCUMENTS AND MUST BE OBTAINED PRIOR TO ERECTION.

STRUCTURAL STEEL ERECTION

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODES OF PRACTICE: 'WELDING PROCESSES' (CP134), 'ABRASIVE BLASTING' (CP121) AND 'SPRAY PAINTING AND POWDER COATING' (CP131) STANDARD CONTROLS.
- CONTRACTOR IS TO ENSURE THAT CRANE SIZE AND LOCATION IS ADEQUATELY ASSESSED FOR CAPACITY BEFORE THE FRAME IS ERECTED. THIS IT TO INCLUDE BUT IS NOT LIMITED TO CRANE SUPPORT BEARING, LOCATION OF UNDERGROUND SERVICES, OVERTURNING, LIFTING CAPACITY, OVERHEAD OBSTRUCTIONS AND TRAFFIC HAZARDS.
- CHAIN AND SLING SETUP FOR FRAMING MEMBERS IS TO BE CHECKED AGAINST APPROVED LIFTING POINTS. WHERE APPROPRIATE AN APPROVED SPREADER BEAM IS TO BE USED.
- PATHWAYS OF OVERHEAD TRAVEL OF FRAMING MEMBERS ARE TO BE CLEARLY MARKED AND ACCESS TO THESE RESTRICTED.
- TEMPORARY PROPPING WORK IS TO BE PROVIDED TO ENSURE STABILITY OF THE FRAMES DURING ERECTION. ALL STEEL FRAMES ARE TO BE TEMPORARY BRACED, UNTIL STRUCTURE IS FULLY ERECTED AND ALL CONNECTIONS BOLTED OR WELDED TOGETHER AS REQUIRED. TEMPORARY SUPPORTING STRUCTURE DURING CONSTRUCTION IS NOT PROVIDED AS PART OF THESE DESIGN DOCUMENTS AND MUST OBTAINED PRIOR TO ERECTION.
- SITE BASED TREATMENTS OF STEEL FRAMING MEMBERS (EG. CUTTING, WELDING, GRIT BLASTING, SPRAY PAINTING, ETC.) IS TO BE MINIMISED WHEREVER POSSIBLE. IF SITE BASED TREATMENT IS UNAVOIDABLE, ADEQUATE PROTECTION, SCREENING AND VENTILATION TO MINIMISE HAZARDS TO PERSONNEL IS TO BE PROVIDED.
- AVOID SITE BASED HOT WORKS WHERE POSSIBLE. IF UNAVOIDABLE, SITE SPECIFIC PROCEDURES FOR HOT WORKS PERMITS ETC. ARE TO BE FOLLOWED.

WORKING AT HEIGHTS

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODES OF PRACTICE: 'MANAGING THE RISK OF FALLS AT WORKPLACES' (CP123), 'PREVENTING FALLS IN HOUSING CONSTRUCTION' (CP127), 'SCAFFOLDS AND SCAFFOLDING WORK' AND AS 1857 STANDARD CONTROLS.
- SCAFFOLDING MUST BE DESIGNED AND BRACED TO RESIST OVERTURNING. SINGLE PROPS MUST NOT BE USED UNLESS A DESIGN CHECK ON STABILITY IS MADE AND THEY ARE FIXED TO A STABLE BASE AT MOUNTAINS.
- CONTRACTOR IS TO USE PASSIVE FALL PREVENTION DEVICE IF POSSIBLE (IE. FIXED PLATFORM, CHERRY PICKERS ETC.)

CONCRETE STRESSING

- CONTRACTOR IS TO ENSURE THAT CONCRETE STRENGTH MEETS REQUIRED CAPACITY AT TIME OF STRESSING.
- RESTRICTED STRESSING AREAS ARE TO BE PROVIDED TO ALL AREAS WHERE STRESSING IS TAKING PLACED BOTH AT LIVE AND DEAD ENDS OF STRESSING DUCTS.
- CONTRACTOR MUST ENSURE THAT AT ALL TIMES DURING STRESSING ONLY QUALIFIED AND APPROVED PERSONNEL HAVE ACCESS TO DESIGNATED STRESSING AREAS.
- SLABS THAT SUPPORT CONTINUED TEMPORARY STRUCTURE MUST BE BACK PROPPED. BACK PROPPING MUST BE CHECKED AND APPROVED PRIOR TO ANY ADDITIONAL CONSTRUCTION LOADING.

CRANES AND OTHER MECHANICAL PLANT

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODES OF PRACTICE: 'CRANES' / 'MANAGING THE RISKS OF PLANT IN THE WORKPLACE' (CP123), 'INDUSTRIAL LIFT TRUCKS' AND AS 2550 STANDARD CONTROLS.
- MECHANICAL LIFTING OF MATERIALS AND COMPONENTS DURING CONSTRUCTION, MAINTENANCE OR DEMOLITION PRESENTS A RISK OF FALLING OBJECTS. CONTRACTORS SHOULD ENSURE THAT APPROPRIATE LIFTING DEVICES ARE USED, THAT LOADS ARE PROPERLY SECURED, AND THAT ACCESS TO AREAS BELOW THE LOAD IS PREVENTED OR RESTRICTED.
- CONTRACTOR IS TO ENSURE THAT CRANE SIZE AND LOCATION IS ADEQUATELY ASSESSED FOR CAPACITY BEFORE ANY LIFT. THIS IT TO INCLUDE BUT IS NOT LIMITED TO CRANE SUPPORT BEARING, LOCATION OF UNDERGROUND SERVICES, OVERTURNING, LIFTING CAPACITY, OVERHEAD OBSTRUCTIONS AND TRAFFIC HAZARDS.

EXISTING BUILDINGS

DEMOLITION

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE: 'DEMOLITION WORK' (CP106) STANDARD CONTROL.
- LOCATIONS OF EXISTING EMBEDDED LIFE SERVICES ARE TO BE ACCURATELY ESTABLISHED PRIOR TO ANY PENETRATION OF EXISTING STRUCTURE.
- DO NOT CUT OR REMOVE ANY STRUCTURAL MEMBER PRIOR TO INSPECTION BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER.
- SEEK ADVICE FROM A SUITABLY QUALIFIED STRUCTURAL ENGINEER PRIOR TO CORING, CHASING, CUTTING OR REMOVAL OF EXISTING CONCRETE AND REINFORCEMENT.

EXISTING STRUCTURAL ADEQUACY

- WHERE EXISTING STRUCTURAL ELEMENTS ARE DAMAGED OR EXHIBIT SIGNIFICANT SECTION LOSS, A SUITABLY QUALIFIED STRUCTURAL ENGINEER SHALL BE ENGAGED TO DESIGN A SYSTEM FOR STABILISING / SUPPORTING THE EXISTING STRUCTURE, SUCH THAT ALL WORK AREAS WILL BE ADEQUATELY SAFE FOR BUILDING WORKS TO COMMENCE. ANY SIGNIFICANT SECTION LOSS OR CORROSION OF EXISTING STRUCTURAL ELEMENTS SHALL BE REPORTED TO THE ENGINEER PRIOR TO PROCEEDING WITH WORKS.
- ANY EXISTING RETAINING STRUCTURES PRESENT ON THE SITE SHALL BE INSPECTED BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER TO ASCERTAIN THE EXTENT OF ANY EXCLUSION ZONES REQUIRED, ESPECIALLY WITH REGARD TO ANY EXCAVATION, THE OPERATION OF HEAVY SURFACE PLANT AND EQUIPMENT, OR STOCKPILING MATERIAL ADJACENT TO EXISTING RETAINING STRUCTURES.
- NO EXCAVATION SHALL BE PERFORMED ADJACENT TO ANY EXISTING STRUCTURE, ESPECIALLY BELOW THE 45° LINE FROM THE UNDERLEVEL OF AN EXISTING FOOTING WITHOUT THE EXPRESS PERMISSION OF THE STRUCTURAL ENGINEER.

ASBESTOS

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODES OF PRACTICE: 'HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE' (CP111) AND 'HOW TO SAFELY REMOVE ASBESTOS' (CP115) STANDARD CONTROLS.
- FOR ALTERATIONS TO OR DEMOLITION OF A BUILDING CONSTRUCTED PRIOR TO 1990, IF THE BUILDING WAS CONSTRUCTED PRIOR TO:
 - 1990 - IT MAY CONTAIN ASBESTOS.
 - 1986 - IT IS LIKELY TO CONTAIN ASBESTOS.
 EITHER IN CLADDING MATERIAL OR IN FIRE-RETARDANT INSULATION MATERIAL. IN EITHER CASE, THE BUILDER SHOULD INSPECT AND, IF NECESSARY, HAVE ANY ASBESTOS REMOVED BY A SUITABLE QUALIFIED PERSON BEFORE DEMOLISHING, CUTTING, SANDING, DRILLING OR OTHERWISE DISTURBING THE EXISTING STRUCTURE.

EXISTING COATINGS

- PRIOR TO ANY WORKS COMMENCING AN APPROPRIATE METHOD OF PAINT REMOVAL AND DISPOSAL IS TO BE DETERMINED, PARTICULARLY ON HISTORIC STRUCTURES. COATINGS CONTAINING COAL TAR EPOXIES, BITUMEN AND ASPHALTS, ZINC CHROMATE AND LEAD AND OTHERS PRESENT A HEALTH RISK. ADEQUATE SCREENING IS TO BE PROVIDED TO THE PUBLIC AND THE SURROUNDING ENVIRONMENT DURING PAINT REMOVAL AND CLEANING OPERATIONS. ENVIRONMENTALLY APPROPRIATE METHODS ARE TO BE EMPLOYED DURING MAINTENANCE AND REPAIR WORK.

HAZARDOUS SUBSTANCES

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE: 'MANAGING RISKS OF HAZARDOUS CHEMICALS IN THE WORKPLACE' (CP120) STANDARD CONTROL.

POWDERED MATERIALS

- MANY MATERIALS USED IN CONSTRUCTION CAN CAUSE HARM IF INHALED IN POWDERED FORM. PERSONS WORKING ON OR IN THE BUILDING DURING CONSTRUCTION, OPERATIONAL MAINTENANCE OR DEMOLITION SHOULD ENSURE GOOD VENTILATION AND WEAR PERSONAL PROTECTIVE EQUIPMENT, INCLUDING PROTECTION AGAINST INHALATION WHILE USING POWDERED MATERIAL OR WHEN SANDING, DRILLING, CUTTING OR OTHERWISE DISTURBING OR CREATING POWDERED MATERIAL.

TREATED TIMBER

- THE DESIGN OF THE BUILDING MAY INCLUDE PROVISION FOR INCLUSION OF TREATED TIMBER WITHIN THE STRUCTURE. DUST OR FLUMES FROM THIS MATERIAL CAN BE HARMFUL. PERSONS WORKING ON OR IN THE BUILDING DURING CONSTRUCTION, OPERATIONAL MAINTENANCE OR DEMOLITION SHOULD ENSURE GOOD VENTILATION AND WEAR PERSONAL PROTECTIVE EQUIPMENT, INCLUDING PROTECTION AGAINST INHALATION OF HARMFUL MATERIAL WHEN SANDING, DRILLING, CUTTING OR USING TREATED TIMBER IN ANY WAY THAT MAY CAUSE HARMFUL MATERIAL TO BE RELEASED. DO NOT BURN TREATED TIMBER.

VOLATILE ORGANIC COMPOUNDS

- MANY TYPES OF GLUES, SOLVENTS, SPRAY PACKS, PAINTS, VARNISHES AND SOME CLEANING MATERIALS AND DISINFECTANTS HAVE DANGEROUS EMISSIONS. AREAS WHERE THESE ARE USED SHOULD BE KEPT WELL VENTILATED WHILE THE MATERIAL IS BEING USED AND FOR A PERIOD AFTER INSTALLATION. PERSONAL PROTECTIVE EQUIPMENT MAY ALSO BE REQUIRED. THE MANUFACTURERS RECOMMENDATIONS FOR USE MUST BE CAREFULLY FOLLOWED AT ALL TIMES.

SYNTHETIC MINERAL FIBRE

- GLASS FIBRE, ROCK WOOL, CERAMIC AND OTHER MATERIAL USED FOR THERMAL OR ACOUSTIC INSULATION MAY CONTAIN SYNTHETIC MINERAL FIBRE WHICH MAY BE HARMFUL IF INHALED, OR IF IT COMES INTO CONTACT WITH THE SKIN, EYES OR OTHER SENSITIVE PARTS OF THE BODY. PERSONAL PROTECTIVE EQUIPMENT, INCLUDING PROTECTION AGAINST INHALATION OF HARMFUL MATERIAL, SHOULD BE USED WHEN INSTALLING, REMOVING OR WORKING NEAR BULK INSULATION MATERIAL.

HAZARDOUS MANUAL TASKS

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE: 'HAZARDOUS MANUAL TASKS' (CP110) STANDARD CONTROL.
- COMPONENTS WITHIN THIS DESIGN WITH A MASS IN EXCESS OF 20 KG SHOULD BE LIFTED BY TWO OR MORE WORKERS OR BY A MECHANICAL LIFTING DEVICE. ALL MATERIAL PACKAGING, BUILDING AND MAINTENANCE COMPONENTS SHOULD CLEARLY SHOW THE TOTAL MASS OF PACKAGES AND WHERE PRACTICAL, ALL ITEMS SHOULD BE STORED ON SITE IN A WAY THAT MINIMISES BENDING BEFORE LIFTING. ADVICE SHOULD BE PROVIDED ON SAFE LIFTING METHODS IN ALL AREAS WHERE LIFTING MAY OCCUR.

CONFINED SPACES

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE: 'CONFINED SPACES' (CP103) AND AS 2865 STANDARD CONTROLS.
- ENCLOSED SPACES WITHIN THE BUILDING MAY PRESENT A RISK TO PERSONS ENTERING FOR CONSTRUCTION, MAINTENANCE OR ANY OTHER PURPOSE. WHERE WORKERS ARE REQUIRED TO ENTER ENCLOSED SPACES, AIR TESTING EQUIPMENT AND PERSONAL PROTECTIVE EQUIPMENT SHALL BE PROVIDED. ONLY TRAINED PERSONNEL ARE TO ENTER A CONFINED SPACE AND THE CONTRACTOR IS TO PREPARE A WORK METHOD STATEMENT ADDRESSING MITIGATION OF RISKS FOR ANY SUCH WORKS. ADEQUATE SIGNAGE IS TO BE PROVIDED TO ALL TEMPORARY AND PERMANENT CONFINED SPACES IN ACCORDANCE WITH AS 2865.

NOISE

- THE CONTRACTOR IS TO CONDUCT WORKS IN ACCORDANCE WITH THE CODE OF PRACTICE: 'MANAGING NOISE AND PREVENTING HEARING LOSS AT WORK' (CP118) STANDARD CONTROL.

OPERATIONAL USE OF BUILDING

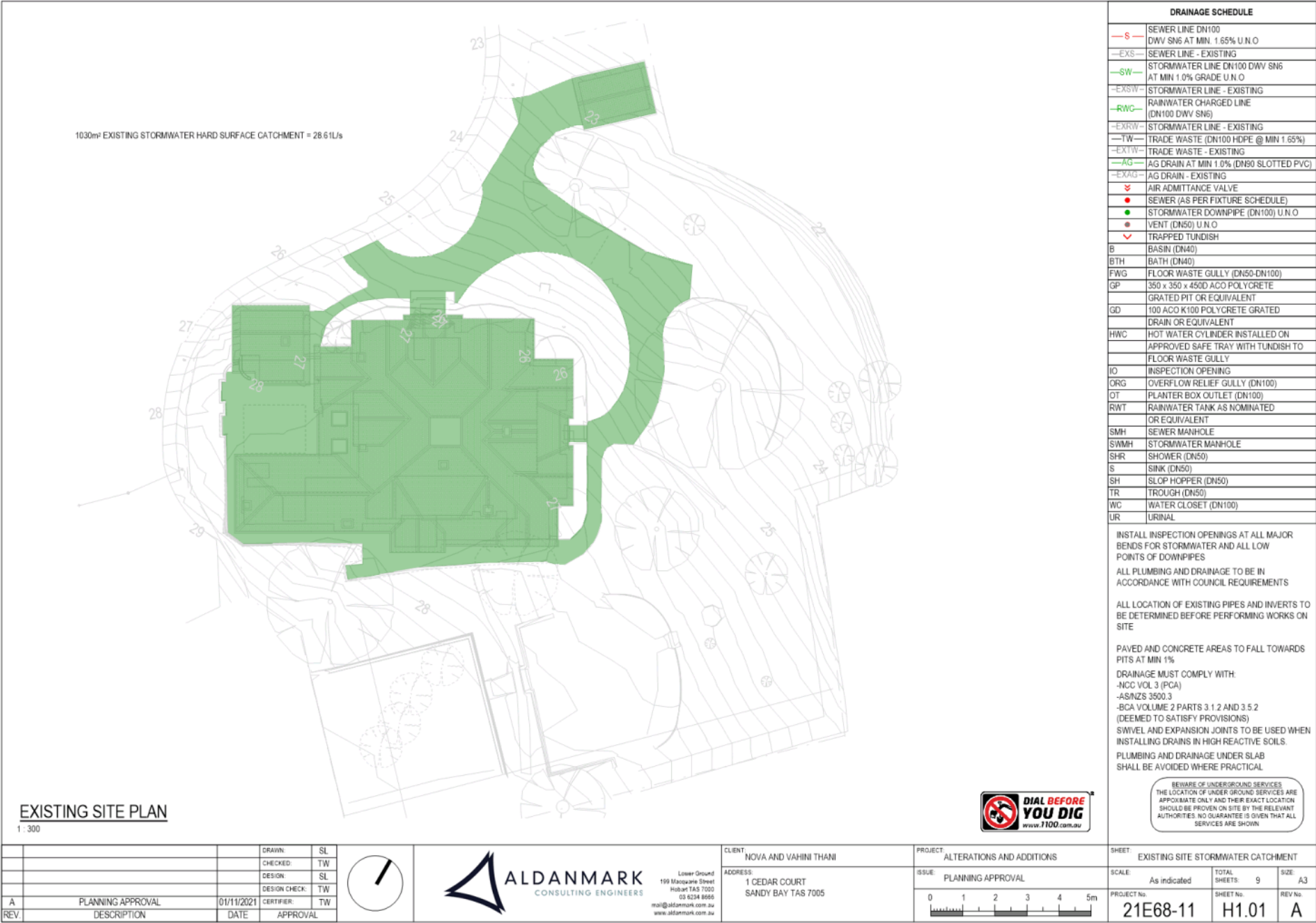
RESIDENTIAL BUILDINGS

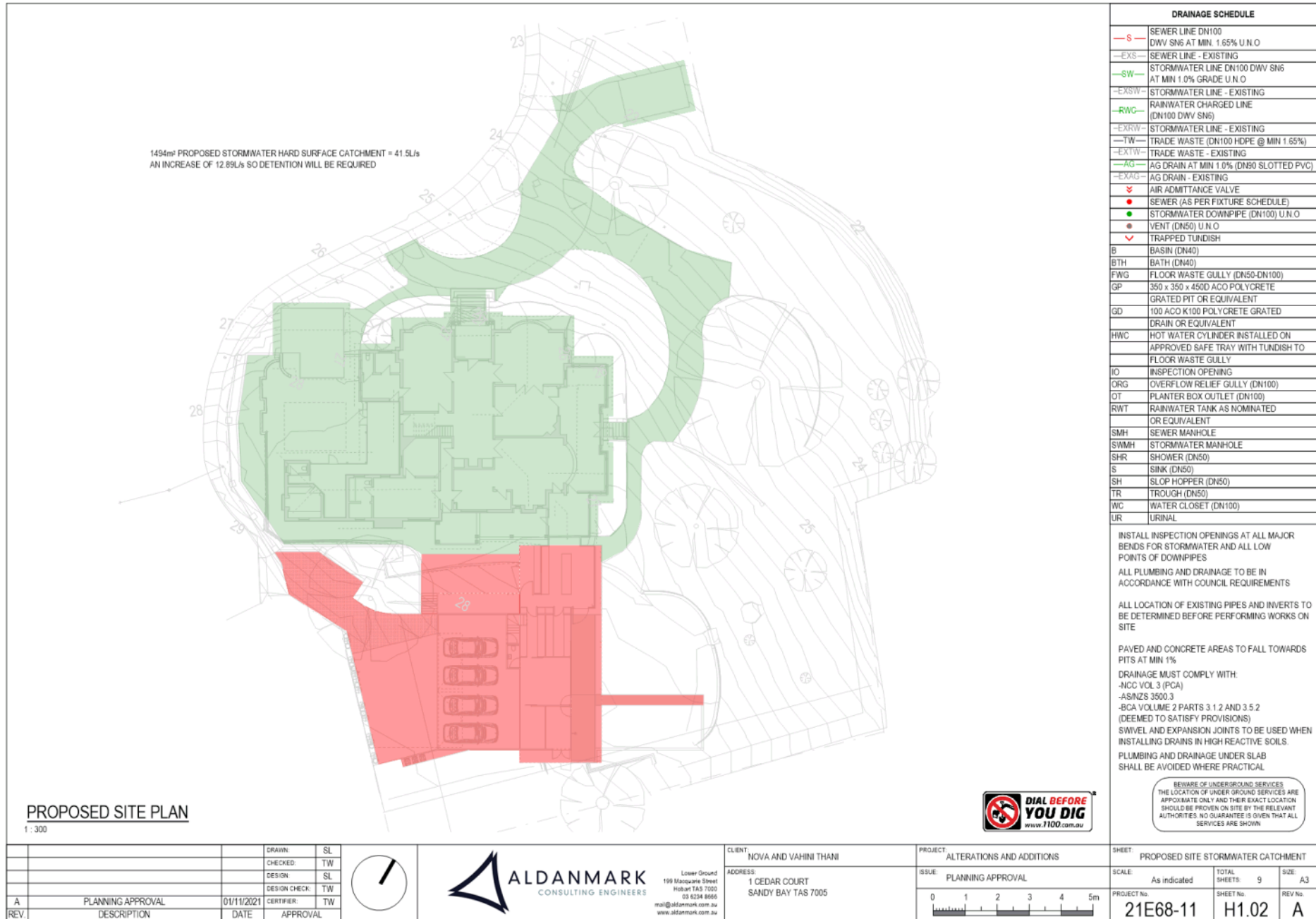
- THIS BUILDING HAS BEEN DESIGNATED AS A RESIDENTIAL BUILDING. IF THE BUILDING, AT A LATER DATE, IS USED OR INTENDED FOR USE AS A WORKPLACE, THE PROVISIONS OF THE WORK HEALTH AND SAFETY ACT 2011 OR SUBSEQUENT REPLACEMENT LEGISLATION SHOULD BE APPLIED TO THE NEW USE.

		DRAWN: SL	
		CHECKED: TW	
		DESIGN: SL	
		DESIGN CHECK: TW	
A	PLANNING APPROVAL	01/11/2021	CERTIFIER: TW
REV	DESCRIPTION	DATE	APPROVAL

Lower Ground
199 Macquarie Street
Hobart TAS 7000
03 6234 8666
mail@aldamark.com.au
www.aldamark.com.au

CLIENT: NOVA AND VAHINI THANI		PROJECT: ALTERATIONS AND ADDITIONS	
ADDRESS: 1 CEDAR COURT SANDY BAY TAS 7005		ISSUE: PLANNING APPROVAL	
		SHEET: WORKPLACE HEALTH & SAFETY NOTES	
		SCALE: TOTAL SHEETS: 9 SIZE: A3 PROJECT No: 21E68-11 SHEET No: H0.03 REV No: A	



**DRAINAGE SCHEDULE**

—S—	SEWER LINE DN100
	DWV SNG AT MIN. 1.65% U.N.O
—EXS—	SEWER LINE - EXISTING
—SW—	STORMWATER LINE DN100 DWV SNG
	AT MIN 1.0% GRADE U.N.O
—EXSW—	STORMWATER LINE - EXISTING
—RWG—	RAINWATER CHARGED LINE
	(DN100 DWV SNG)
—EXRW—	STORMWATER LINE - EXISTING
—TW—	TRADE WASTE (DN100 HDPE @ MIN 1.65%)
—EXTW—	TRADE WASTE - EXISTING
—AG—	AG DRAIN AT MIN 1.0% (DN90 SLOTTED PVC)
—EXAG—	AG DRAIN - EXISTING
⌵	AIR ADMITTANCE VALVE
●	SEWER (AS PER FIXTURE SCHEDULE)
●	STORMWATER DOWNPIPE (DN100) U.N.O
●	VENT (DN50) U.N.O
⌵	TRAPPED TUNDISH
B	BASIN (DN40)
BTH	BATH (DN40)
FWG	FLOOR WASTE GULLY (DN50-DN100)
GP	350 x 350 x 450D ACO POLYCRETE
	GRADED PIT OR EQUIVALENT
GD	100 ACO K100 POLYCRETE GRATED
	DRAIN OR EQUIVALENT
HWC	HOT WATER CYLINDER INSTALLED ON
	APPROVED SAFE TRAY WITH TUNDISH TO
	FLOOR WASTE GULLY
IO	INSPECTION OPENING
ORG	OVERFLOW RELIEF GULLY (DN100)
OT	PLANTER BOX OUTLET (DN100)
RWT	RAINWATER TANK AS NOMINATED
	OR EQUIVALENT
SMH	SEWER MANHOLE
SWMH	STORMWATER MANHOLE
SHR	SHOWER (DN50)
S	SINK (DN50)
SH	SLOP HOPPER (DN50)
TR	TROUGH (DN50)
WC	WATER CLOSET (DN100)
UR	URINAL

INSTALL INSPECTION OPENINGS AT ALL MAJOR BENDS FOR STORMWATER AND ALL LOW POINTS OF DOWNPIPES

ALL PLUMBING AND DRAINAGE TO BE IN ACCORDANCE WITH COUNCIL REQUIREMENTS

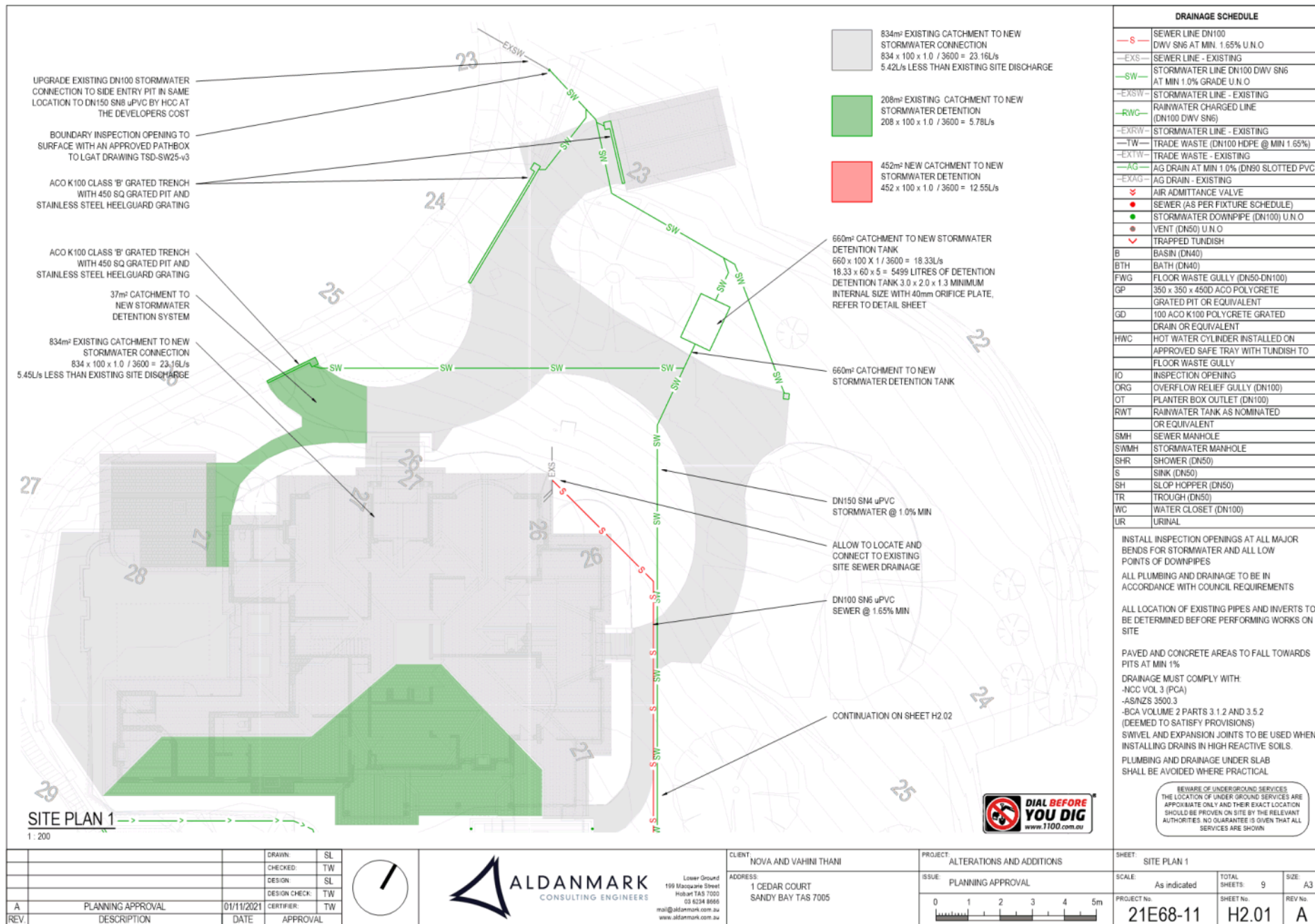
ALL LOCATION OF EXISTING PIPES AND INVERTS TO BE DETERMINED BEFORE PERFORMING WORKS ON SITE

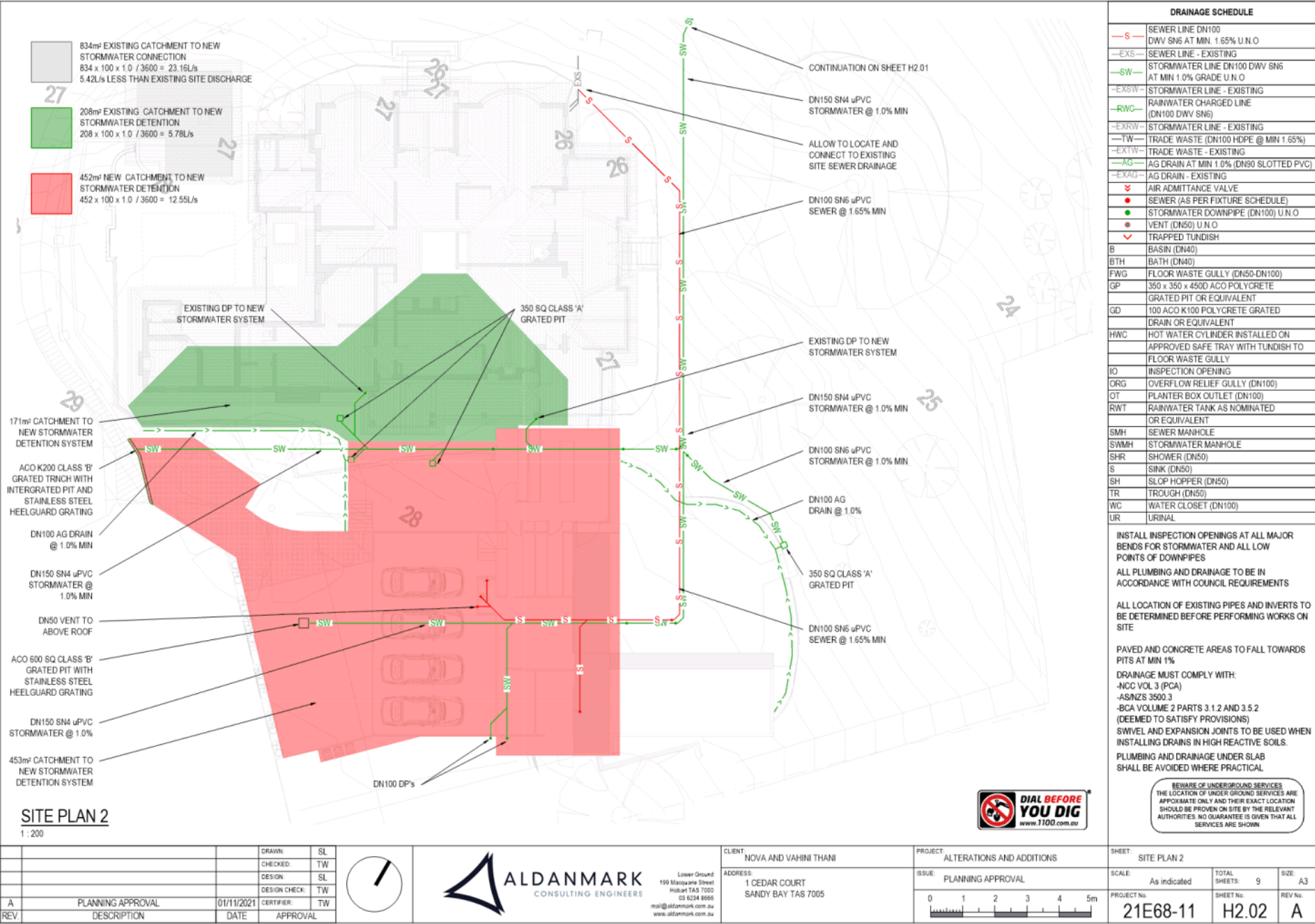
PAVED AND CONCRETE AREAS TO FALL TOWARDS PITS AT MIN 1%

DRAINAGE MUST COMPLY WITH:
 -NCC VOL 3 (PCA)
 -AS/NZS 3500.3
 -BCA VOLUME 2 PARTS 3.1.2 AND 3.5.2 (DEEMED TO SATISFY PROVISIONS)
 SWIVEL AND EXPANSION JOINTS TO BE USED WHEN INSTALLING DRAINS IN HIGH REACTIVE SOILS.

PLUMBING AND DRAINAGE UNDER SLAB SHALL BE AVOIDED WHERE PRACTICAL







STORMWATER DETENTION TANK DRAINAGE ORIFICE SIZING SCHEDULE										
Project Name:		1 Cedar Court, Sandy Bay			Project No.:		21E68-11			
Engineer:		Stuart Iamond			Date:		27/10/2021			
Revision: A										
CATCHMENT AREA	BASIN No	LOCATION	AREA m ²	REQUIRED OSD (1) m ³	PSD (2) m ³ / s	OUTLET TYPE	OUTLET DIAMETER mm	DISCHARGE COEFFICIENT C	HEAD OF WATER (3) m	OUTLET X-SECTIONAL AREA m ²
	1		660	5.5	0.0030	Orifice	40	0.60	0.80	0.001
$= (L17^4 / 3.142) \times 0.5 \times 1000$ $= G17 / ((117^2 (2^9 \times 81 \times K17)^{0.5}))$										
<small>(1) On Site Detention volume calculated from AEP20 yr 5 Minute Duration Rainfall of 100mm (2) Permissible Site Discharge calculated from Hobart City Council development criteria (3) Head of Water calculated to invert of pipe outlet</small>										

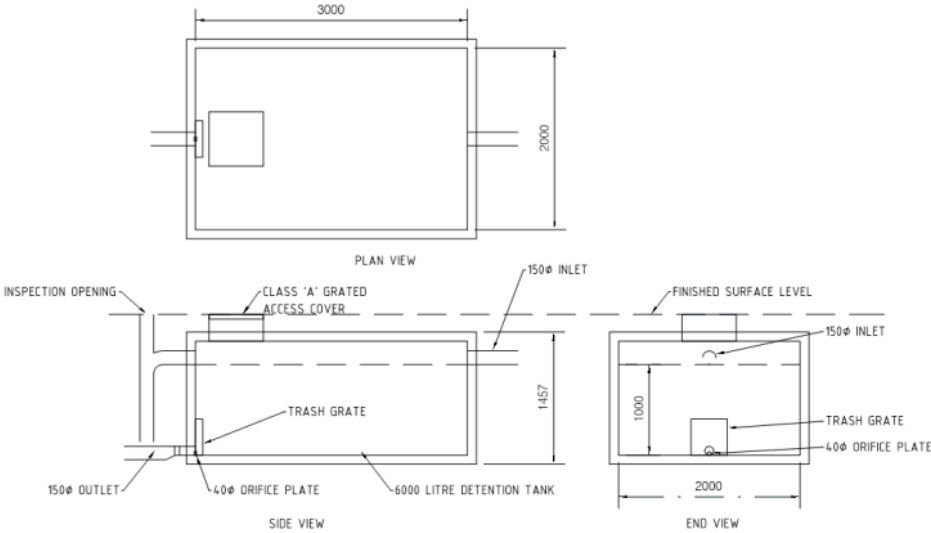
DETENTION TANK ORIFICE SIZING CALCULATIONS

- Bottom area of tank or container (m²)
- H - height between surface and aperture (m)
- A - aperture area (m²)
- C_d - discharge coefficient
- no. of "slices" or segments (for the iterative calculation)

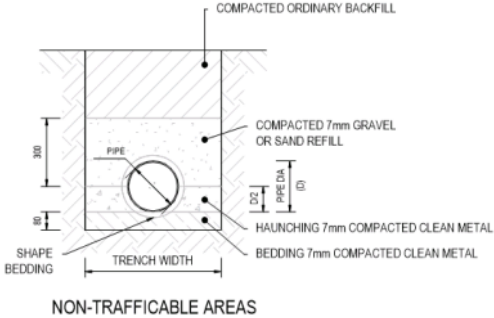
Segment	Average Height between Segment and Aperture (m)	Average Flow (m ³ /s)	Volume in Segment (m ³)	Time to Drain Segment (s)
0	0.95	0.00259	0.6	232
1	0.85	0.00245	0.6	245
2	0.75	0.0023	0.6	261
3	0.65	0.00214	0.6	280
4	0.55	0.00197	0.6	304
5	0.45	0.00178	0.6	337
6	0.35	0.00157	0.6	382
7	0.25	0.00133	0.6	452
8	0.15	0.00103	0.6	583
9	0.05	0.000594	0.6	1010
SUM			6	4084

DETENTION TANK EMPTYING TIME CALCULATIONS

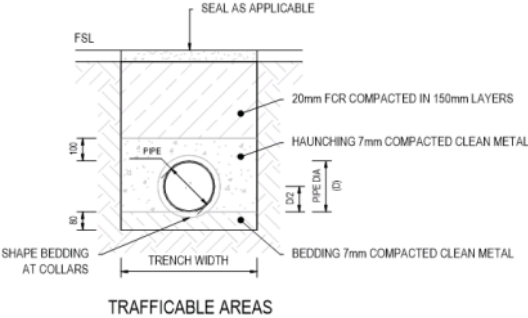
<div style="display: flex; align-items: center;"> <div> ALDANMARK CONSULTING ENGINEERS <small>Lower Ground 199 Macquarie Street Hobart TAS 7000 03 6234 8666 mail@aldanmark.com.au www.aldanmark.com.au</small> </div> </div>		CLIENT:	NOVA AND VAHINI THANI		PROJECT:	ALTERATIONS AND ADDITIONS		SHEET: DETENTION TANK CALCULATIONS										
		ADDRESS:	1 CEDAR COURT SANDY BAY TAS 7005		ISSUE:	PLANNING APPROVAL		SCALE:	TOTAL SHEETS: 9	SIZE: A3								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">A</td> <td style="width: 40%;">PLANNING APPROVAL</td> <td style="width: 20%;">01/11/2021</td> <td style="width: 20%;">CERTIFIER: TW</td> </tr> <tr> <td>REV</td> <td>DESCRIPTION</td> <td>DATE</td> <td>APPROVAL</td> </tr> </table>		A	PLANNING APPROVAL	01/11/2021	CERTIFIER: TW	REV	DESCRIPTION	DATE	APPROVAL			PROJECT No:	21E68-11		SHEET No:	H3.01	REV No:	A
A	PLANNING APPROVAL	01/11/2021	CERTIFIER: TW															
REV	DESCRIPTION	DATE	APPROVAL															



DETENTION TANK
1 : 50



TRENCH WIDTHS	
PIPE DIAMETER	MIN TRENCH WIDTH
LESS THAN 50mm	250
75 - 100mm	450
150 - 300mm	600
ABOVE 300mm	DIA. PLUS 300mm



TYPICAL PIPE TRENCH DETAILS
1 : 20

		DRAWN: SL		 <div>Lower Ground 199 Macquarie Street Hobart TAS 7000 03 6234 8666 mail@aldanmark.com.au www.aldanmark.com.au</div>	CLIENT: NOVA AND VAHINI THANI		PROJECT: ALTERATIONS AND ADDITIONS		SHEET: HYDRAULIC DETAILS				
		CHECKED: TW			ADDRESS: 1 CEDAR COURT SANDY BAY TAS 7005		ISSUE: PLANNING APPROVAL		SCALE: As indicated		TOTAL SHEETS: 9	SIZE: A3	
		DESIGN: SL											
		DESIGN CHECK: TW											
A	PLANNING APPROVAL	01/11/2021	CERTIFIER: TW						PROJECT No: 21E68-11		SHEET No: H4.01	REV No: A	
REV	DESCRIPTION	DATE	APPROVAL										



Attn: Planning Officer
Hobart City Council

Tuesday, 8 June 2021

File Reference: 1 Cedar Court, Sandy Bay

Dear Planning Officer,

I am writing this letter to accompany the submission for Development Application for 1 Cedar Court, Sandy Bay. The existing Federation Queen Anne style residence 'The Gables' was designed by Christopher Cowper and constructed in 1911.

The new works are to incorporate a new kitchen, bbq area and courtyard, garage (and associated mud room) and driveway, storage, home gym with associated powder room, and a pool. These works are to accommodate the needs of the growing family now and into the future.

The new extension is respectfully situated to the rear of the existing building and is also set back from all major facades of the existing building. The proposed roof is modest and sits no higher than the existing highly detailed gable roof fascia boards. The new works connect to the existing house by a low flat roof. This roof line then steps up (but remains lower than the existing gables) to incorporate sufficient height for the garage which mediates the level change. The proposed works are subservient through sitting, scale, bulk, height, fenestration, materials, and finishes.

The new extension touches the existing building lightly. As part of the works, a section of brick wall is to be removed to make an opening between the informal dining and new kitchen – this wall has been altered in the past. All existing red bricks removed in this wall will be retained and reused as part of the new works.

The extension is simply detailed taking cues from the highly crafted fenestration of the existing. New slender circular columns are paired to echo the existing twin turned woodwork Tuscan columns. The extension draws reference from the existing construction hierarchy; sandstone base, red brickwork to window sill height (typically) and lightweight finishes above, such as timber and stucco render. The proposed works will be complimentary to the existing yet clearly identifiable as different periods of construction.

A primary element of our clients brief, is for the kitchen to be the heart of the home – a gathering hub for the family. The original kitchen would have been designed for workers/staff and to be tucked away hence its centralized location at the rear of the home. Key to our client's brief is for their new kitchen to be connected to and celebrate the establish garden within which the home sits. For this reason, the new works are aligned to look over the garden without being visible past the existing building line (on approach via Cedar Court).

Please do not hesitate to contact me should you have any questions or concerns.

Yours Sincerely

Benn Turner
Project Architect



Attn: Helen Ayers
Planning Officer
Hobart City Council

Monday, 1 November 2021

Reference: 1 Cedar Court, Sandy Bay - PLN-21-388, RFI response

Dear Helen,

The below information is to accompany the drawings submitted in response to the request for additional information dated 03 August 2021.

**Planning
PLN Fil**

1. Please refer drawings A00-02 and A02-00
2. Please refer drawing A04-01
3. Please refer drawings A00-02, A02-00, A02-02, A02-03
4. Please refer drawings A04-01 and A05-01
5. Please refer drawings A04-00 and A04-01

Tasmanian Heritage Council

1. Please refer drawings A01-50 and A01-51
2. Please refer drawing A05-01
3.
 - Please refer drawing A04-02
 - Please refer below images





- Please refer drawing A02-00
- 4. Please refer drawing A04-01.
- 5. Please refer drawings A04-00 and A04-01.

Heritage Code**HER F11**

Please refer below images



Existing concrete pavers - courtyard



Existing concrete pavers - courtyard



Existing concrete pavers - courtyard



Existing concrete pavers - courtyard



Existing concrete pavers - courtyard



Existing concrete pavers - courtyard

HER Fi 2

Please refer drawing A05-01

HER Fi 3

Please refer drawing A10-00

HER Fi4

Please refer drawing A05-01

HER Fi 5

Please refer drawings A01-50 and A01-51

HER Fi 6

Please refer drawings A01-50 and A01-51

Parking and Access**PA 2.1****E6.7.2****A1(a)**

- Please refer drawing A02-00 and A02-03, in addition please refer *Midson Traffic 1-7 Cedar Court – Response to Council RFI*.
- Please refer drawing A05-01
- Please refer *Midson Traffic 1-7 Cedar Court – Response to Council RFI*

**PA 2.2**

Please refer *Midson Traffic 1-7 Cedar Court – Response to Council RFI*

E6.7.2**A1 (a)**

Please refer *Midson Traffic 1-7 Cedar Court – Response to Council RFI*

PA 5.1

Please refer drawing A02-00 and *Midson Traffic 1-7 Cedar Court – Response to Council RFI*.

E6.7.5**A1**

- Please refer drawing A02-00
- Please refer drawings A02-00 and A02-03
- Please refer drawing A02-00 and *Midson Traffic 1-7 Cedar Court – Response to Council RFI*.
- Please refer drawing A05-01
- Please refer drawing A02-00
- Please refer drawings A02-00 and A05-00
- Please refer drawing A04-01
- Please refer *Midson Traffic 1-7 Cedar Court – Response to Council RFI*

PA6**E6.7.6****A1**

- Please refer drawings A02-00, A02-02 and A02-03
- Please refer drawing A02-04

Stormwater Code**Sw1**

Please refer drawings H0.01, H0.02, H0.03, H1.01, H1.02, H2.01, H2.02, H3.01.

Sw6

Please refer drawings H0.01, H0.02, H0.03, H1.01, H1.02, H2.01, H2.02, H3.01.

Yours Sincerely

Benn Turner
Project Architect



2 February 2021

Benn Turner
Preston Lane Architects
60 Barrack Street
Hobart TAS 7000

Dear Benn,

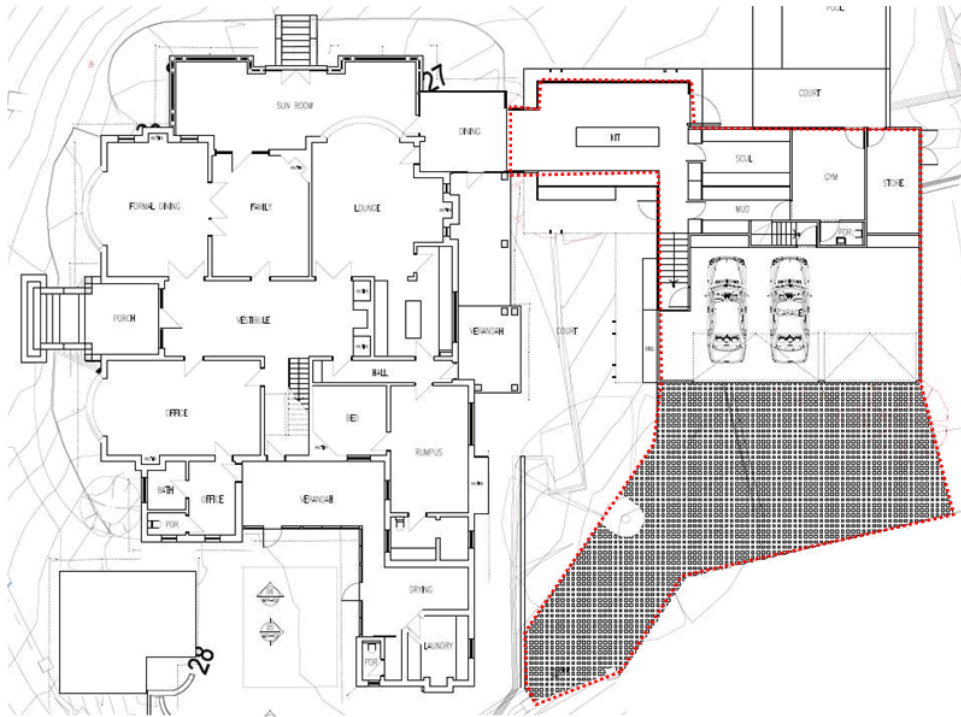
1 CEDAR COURT – TRAFFIC ENGINEERING EXPERT OPINION

Further to our recent discussions I confirm that I have reviewed the proposed plans and inspected the site and surrounding network for the proposed development at the abovementioned address.

The proposed development is for an additional vehicular crossover servicing a 3-car garage at the cul-de-sac end of Cedar Court as shown in Figure 1.

Council have raised concerns regarding the proposed new vehicular access, citing the following key concerns:

- Non-standard turning head arrangement at the termination of Cedar Court, at the location where the proposed vehicular cross-over is proposed.
- Proliferation of vehicular accesses within the turning head of Cedar Court.
- Concerns of vehicle safety.
- Potential for Council to extend the footpath in the future.
- Council would generally not entertain 3 accesses for a single dwelling.

Figure 1 Proposed Development

This letter provides an expert opinion on each of the matters raised by Council.

1. Cedar Court Turning Head & Number of Accesses

Cedar Court is a local access road that services 5 houses. It has very low volume and functions as an accessway for the properties it services. Turning at the end of the cul-de-sac is available with a 'Y' shaped turning area that is approximately 15 metres wide. The LGAT Standard drawings specify a 'Y' width of 24 metres for new designs. The current construction of the turning area is therefore smaller than current standards, but does permit the turning of small vehicles.

Cul-de-sacs typically have multiple driveways within the turning area of the road. In this case three driveways are located immediately adjacent to each other at the end of the cul-de-sac opposite the subject site.

A quick review cul-de-sacs in the nearby transport network was undertaken. The following was noted:

- Solana Place. 18m Circular cul-de-sac. 6 driveways, including driveways that service multiple dwellings.
- Mawhera Avenue. 14m 'T' hammerhead cul-de-sac. 5 driveways, including one driveway that services high-density flats.
- Melrose Court. 14m hybrid 'T'/ circular cul-de-sac. 3 driveways.
- Eurella Avenue. 13m widened 'triangle' cul-de-sac. 5 driveways.

In my opinion the addition of the proposed driveway will not be unusual based on the above findings. Many similar examples are available in the Greater Hobart area.

2. Vehicle Safety

Council raised road safety as an issue that would prevent the proposed development.

A quick review of crash history of the cul-de-sacs highlighted in Section 2 did not provide any indication that there is any road safety issues associated with the turning heads or driveways.

In this case the proposed driveway will be located at the opposite end of the 'Y' turning area and will effectively provide improved turning due to the removal of the hedge. The driveway will be separate and in clear view of the three existing driveways.

Given that each driveway will typically generate 1 vehicle per hour during peak periods, and vehicles entering and exiting the driveways will have clear vision of manoeuvring associated with the other driveways, then the conflict risk between vehicles is very low. The risks are further minimised considering the very low traffic volume (only traffic associated with the driveways within Cedar Court would be utilising the road) and very low vehicle speeds (due to the residential nature and dead-end construction of the road).

In my opinion there is no significant road safety risk associated with the addition of a new driveway in the cul-de-sac.

3. Footpath Extension

Council have stated that the footpath may be extended at some stage in the future. The existing footpath currently terminates near the proposed driveway location. In my opinion the footpath could be extended and incorporated into the proposed design of the driveway, noting that footpath construction is not required over a driveway cross-over.

4. Number of Vehicular Accesses

The existing access configuration of the dwelling consists of two driveways that form an entry and exit at the front of the dwelling. Effectively the two existing driveways function as a single driveway access with separated entry and exit.

It is not uncommon for dwellings to have multiple vehicular accesses, particularly properties with multiple street frontages, or properties that have rear access via a shared ROW. Whilst the subject site does not have multiple street frontages, Cedar Court wraps around the property and the proposed garage development provides vehicular access to the rear of the building that is not currently available.

5. Summary

Based on the above assessment it is my opinion that there are no significant issues that would prevent the construction of a new vehicular cross-over within the cul-de-sac of Cedar Court. Specifically:

- The construction of the existing cul-de-sac is not uncommon in urban environments. There are numerous examples in the nearby road network that have similar configurations and dimensions.
- Three driveways currently connect to the existing cul-de-sac. The proposed driveway would connect to the opposite end of the 'Y' cul-de-sac. The driveway would be highly visible to users of the existing driveways.

- The proposed driveway would improve manoeuvring within the cul-de-sac.
- There are no significant safety issues associated with the provision of a new driveway at the cul-de-sac on the basis of very low traffic volumes and vehicle speeds. There is minimal risk of conflict between users of the driveways.
- The construction of the proposed driveway does not preclude the future construction of a footpath. Provision could be made in the driveway design to accommodate future footpath connectivity if required.

Please contact me on 0437 366 040 if you require any further information.

Yours sincerely,



Keith Midson BE MTraffic MTransport FIEAust CPEng EngExec NER

DIRECTOR

Midson Traffic Pty Ltd



Keith Midson
Midson Traffic Pty Ltd
28 Seaview Avenue
Taroona TAS 7053
0437 366 040

30th August 2021

Benn Turner
Preston Lane Architects
60 Barrack St
Hobart TAS 7000

Dear Benn,

1-7 CEDAR COURT – RESPONSE TO COUNCIL RFI

This letter has been prepared in response to Council's request for further information regarding the proposed garage development at the abovementioned address dated 3rd August 2021.

Specifically this letter deals with the following matters within Council's RFI:

- PA2.1 – Driveway design
- PA2.2 – Pedestrian sight distance
- PA5.1 – Car Parking Layout

The response to these matters are set out in the following sections.

1. PA2.1 – Design of Vehicular Accesses

The proposed driveway connects at the eastern termination of the cul-de-sac. The driveway location is shown in Figure 1.

The Acceptable Solution A1 of Clause E6.7.2(a) of the Planning Scheme states "*in the case of non-commercial vehicle access; the location, sight distance, width and gradient of an access must be designed and constructed to comply with section 3 – "Access Facilities to Off-street Parking Areas and Queuing Areas" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking*".

The requirements of AS2890.1 are set out in the following sections.

Figure 1 Cedar Court Driveway Location

Driveway Location

AS2890.1 defines locations where domestic driveways should not be placed in relation to intersections. In this case the driveway is not located in close proximity to a major road junction as defined by Figure 3.1 of AS2890.1.

The location of the driveway therefore complies with the requirements of 'driveway location' in the Acceptable Solution A1(a) of Clause E6.7.2 of the Planning Scheme.

Driveway Sight Distance

AS2890.1 requires 30 metres minimum sight distance along the frontage road for a domestic property access fronting onto a 40-km/h road (noting that vehicle speeds in Cedar Court are significantly lower than 40-km/h due to the termination of the road at the site's access – ie. all vehicles are slowing to stop or access driveways at the cul-de-sac head).

Sight distance is only relevant in one direction due to the driveway's location at the end of the cul-de-sac. The available sight distance is approximately 30 metres from the driveway along the road carriageway from the driveway.

The vehicle sight distance at the driveway therefore complies with the requirements of 'sight-distance' in the Acceptable Solution A1(a) of Clause E6.7.2 of the Planning Scheme.

Pedestrian sight distance

The assessment of pedestrian sight lines was undertaken in section 2 of this letter. The proposed driveway does not provide pedestrian sight triangles in accordance with AS2890.1 requirements. A risk assessment deemed the driveway to meet the requirements of Performance Criteria P1 of Clause E6.7.2 of the Planning Scheme.

Driveway Width

The minimum width of a domestic driveway is 3.0 metres in accordance with AS2890.1. The driveway width complies with this requirement.

The width of the driveway therefore complies with the requirements of 'width' in the Acceptable Solution A1(a) of Clause E6.7.2 of the Planning Scheme.

Gradient

The maximum gradient of a domestic driveway is 25% in accordance with AS2890.1 requirements. The driveway gradient does not exceed this value thereby complying with the gradient requirements of Acceptable Solution A1(a) of Clause E6.7.2 of the Planning Scheme.

AS2890.1 Driveway Assessment Summary

Based on the above assessment, the driveway design complies with all aspects of AS2890.1 requirements with the exception of pedestrian sight distance. The driveway was therefore assessed against the requirements of Performance Criteria P1 of Clause E6.7.2 of the Planning Scheme which states:

"Design of vehicle access points must be safe, efficient and convenient, having regard to all of the following:

- (a) avoidance of conflicts between users including vehicles, cyclists and pedestrians;*
- (b) avoidance of unreasonable interference with the flow of traffic on adjoining roads;*
- (c) suitability for the type and volume of traffic likely to be generated by the use or development;*
- (d) ease of accessibility and recognition for users".*

The following is relevant with respect to the proposed driveway:

- a. Conflict avoidance. As noted in the risk assessment, the risk of conflict between vehicles and vehicles or vehicles and pedestrians is extremely low, resulting in a 'low risk' environment.
- b. Interference with traffic flow. Traffic volumes at the proposed driveway location are very low and only relate to movements at property access at the head of the cul-de-sac. The peak generation of 1 vehicle per hour will not have any significant adverse impact on traffic flow in Cedar Court.
- c. Suitability for type and volume of traffic. The proposed driveway will be located in a residential road environment that is suitable for property access, noting that no through traffic is located at the head of the cul-de-sac.
- d. Ease of Accessibility and Recognition for Users. The driveway will be clearly visible and its function will be easily identifiable for users and neighbouring properties.

Based on the above, the driveway meets the requirements of Performance Criteria P1 of Clause E6.7.2 of the Planning Scheme.

Council have requested in their RFI:

"Scaled and dimensioned design drawing(s) showing the Design of Vehicular Accesses achieves the objective of clause E6.7.2, of the Hobart Interim Planning Scheme 2015.

To satisfy the relevant Acceptable Solution(s) for the above mentioned clause(s), the scaled and dimensioned design drawings must include:

- *Plan view showing the dimensioned; layout of the proposed access driveway(s) within the road reserve up to the property boundary, access driveway width at the property boundary, any access gate's dimensions (i.e. width, height, transparency) including clearway width, and the dimensions (i.e. height, transparency) of any fencing or screening within 2.0m either side of the access driveway.*
- *Cross section(s), and Longitudinal section(s), of the proposed chainage profile(s) (e.g. centreline path, wheel paths, swept paths) along the access driveway (i.e. roadway, vehicular crossing, foot/front of path, back of path); clearly showing the gradients and elevations of the full finished surface level, including existing natural surface levels and proposed cutfill depths, within the road reservation.*
- *Plan view clearly detailing standard swept paths for a B99 vehicle, for both lefthand and righthand turns, completely entering and exiting the lot, respectively, by way of the designed vehicular access exclusively, swept paths (turn radii) shall be contained within the property's street frontage; defined by extension of the lot side boundaries to the road reservation.*

Where the design drawing(s) do not satisfy the relevant Acceptable Solution(s), please provide design documentation prepared by a suitably qualified person for assessment under the relevant Performance Criteria".

I understand that the plan view showing dimensional layout of the access driveway is being provided to Council by Preston Lane Architects.

The Australian Standards, AS2890.1, *Off-Street Car Parking*, 2004, provides the requirements of the type of vehicles used in parking areas. There are two 'car' vehicle types contained in AS2890.1: B85 and B99 vehicles. These vehicles represent the 85th and 99th percentile cars in the Australian fleet respectively.

AS2890.1 states the following with respect to B99 vehicles:

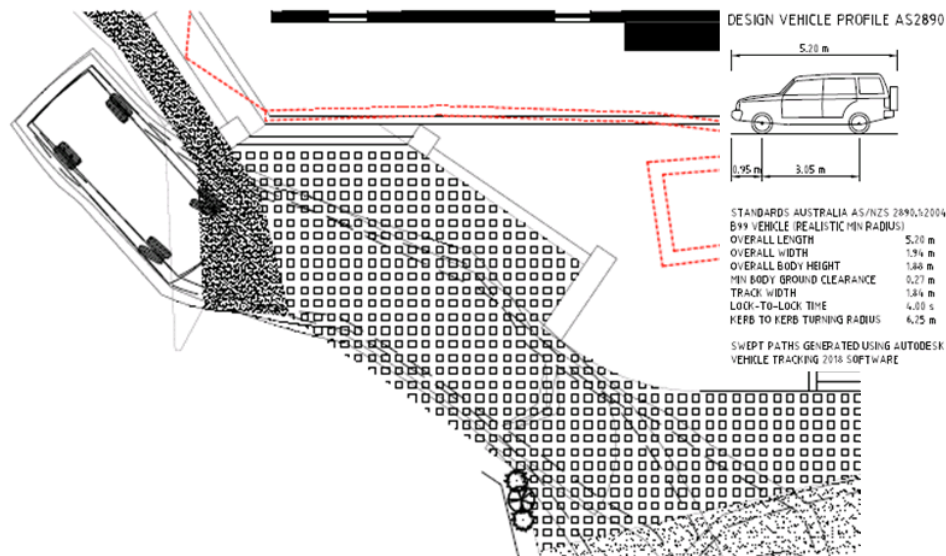
"Design dimensions based on the B99 vehicle are required at all locations where failure of a vehicle to be able to physically fit into the facility would occasion intolerable congestion and possible hazard. Such locations shall include all access driveways, ramps and circulation roadways, unless there are special circumstances of severe space limitation coupled with relatively low traffic volumes in which case the B85 vehicle dimensions may be used".

In this case the development proposal is residential and will not provide public car parking. With a peak generation of 1 vehicle per hour coupled with extremely low traffic generation at the end of the cul-de-sac of Cedar Court it would not be possible to create 'intolerable' congestion. For this reason the B99 is not the appropriate design vehicle to test the swept paths of the parking areas of the proposed development. The B85 vehicle is therefore the appropriate design vehicle for the proposed development.

Despite this, swept paths of a B99 vehicle were tested at the site's driveway using Autodesk Vehicle Tracking 2018 software.

The swept paths clearly demonstrate that a B99 vehicle can enter and exit the proposed driveway utilising the boundaries of the site. This is shown in Figure 2 for the entry manoeuvre. The exit manoeuvre is largely similar with the B99 vehicle able to complete the manoeuvre wholly contained in the property boundaries. Note that left turn and right turn manoeuvres are not relevant as the driveway is located at the head of a cul-de-sac.

Figure 2 B99 Vehicle Driveway Access



2. PA2.2 – Pedestrian Sight Lines

Council have requested in their RFI:

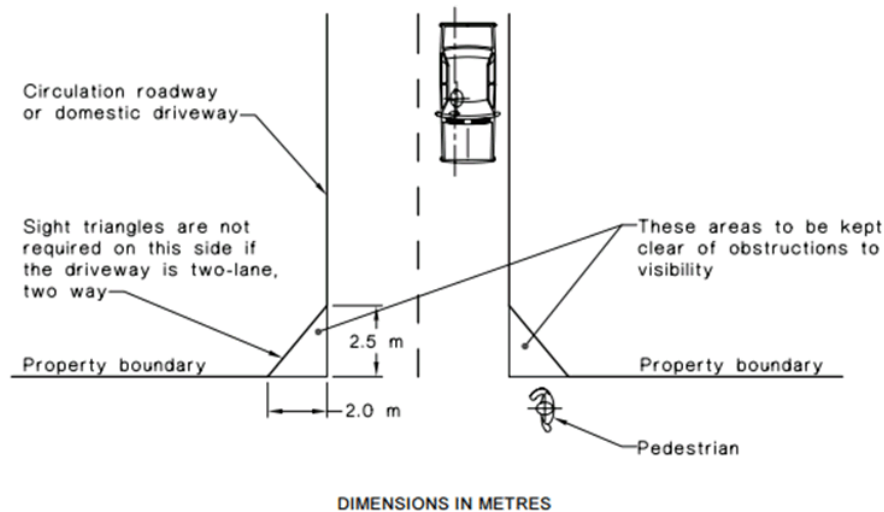
"To satisfy the relevant Acceptable Solution(s) for the above mentioned clause(s), the scaled and dimensioned design drawings must include:

- Plan and Elevation views showing, sight distance to pedestrians (i.e. pedestrian sight triangles, showing minimum sight lines for pedestrian safety, entirely within the subject lot) remain unobstructed 2.0m either side of the vehicular access circulation roadway or driveway at the property boundary, in accordance with AS/NZS 2890.1:2004 Section 3.2.4;*

Where the design drawing(s) do not satisfy the relevant Acceptable Solution(s), please provide design documentation prepared by a suitably qualified person for assessment under the relevant Performance Criteria".

Section 3.2.4(b) of AS2890.1 provides the requirements for sight distance to pedestrians: "*clear sight lines as shown in Figure 3.3 shall be provided at the property line to ensure adequate visibility between vehicles leaving the car park or domestic driveway and pedestrians on the frontage road*". Figure 3.3 is reproduced in Figure 3.

Figure 3 AS2890.1 Pedestrian Sight Line Requirements



In this case it would not be possible to provide pedestrian sight distance splays in accordance with AS2890.1 requirements without modifications to fence structures.

The driveway design is similar to other domestic driveways in the nearby area. The following points are relevant with respect to the operation of the domestic driveway:

- The driveway for a residential property and is curved near its connection with Cedar Court. Speeds will therefore be very low for any vehicle exiting the site. AS2890.1 provides requirements for all driveway types (ie. domestic and commercial), and in many cases it could be expected that vehicles may be travelling at moderate speed as they would be able to accelerate along a greater distance than possible in this case. It is typically unusual for residential driveways to provide pedestrian sight triangles at their connection with the frontage road.
- Pedestrian volumes are extremely low in Cedar Court. There is currently no footpath extending beyond the proposed driveway and no pedestrian generating land uses nearby other than residential property within the cul-de-sac. Council have requested the footpath be extended to the end of the hammer head. The design has incorporated this to take place. With the proposed driveway being located at the end of a cul-de-sac, there is very little activity (pedestrians and vehicles). Pedestrian activity at the proposed driveway access only relates to access to the neighbouring property located at the termination of the cul-de-sac. The exposure to pedestrian movements at the access is therefore very low compared to busy city environments for example.
- The frequency of use of the domestic driveway is very low. Only accessing a single dwelling, the traffic generation of the access would be in the order of 8 vehicle movements per day with a peak of 1 vehicle per hour. The exposure of vehicular manoeuvres at the access is therefore very low compared to commercial driveway accesses busy city environments.

A risk assessment approach was therefore used in the assessment of the road safety aspects associated with the new driveway.

A road safety assessment was undertaken on the driveway access in relation to potential pedestrian conflict. The assessment was based on the Austroads, *Guide to Road Safety Part 6A: Implementing Road*

Safety Audits, 2019. This process identifies risks in the transport network and identifies potential risk treatments.

The risk assessment associated with the road safety assessment was done with reference to the Australian Standard AS/ NZS ISO 31000, Risk Management – Principles and Guidelines, 2018. The risk analysis matrix used in this report is shown in Figure 4.

Figure 4 Risk Analysis

HAZARD	PROBABILITY				
	Highly Likely	Likely	Occasionally	Unlikely	Highly Unlikely
	1	2	3	4	5
	Repeated Occurrence	May Occur Several Time	May Occur Sometimes	Not Very Likely to Occur	Very Unlikely to Occur

HAZARD	CONSEQUENCE				
	Catastrophic	Fatal	Serious	Marginal	Negligible
	A	B	C	D	E
	Multiple Loss of Life	Single Death	Severe Injury	Minor Injury	Superficial Injury or Property Damage

		1	2	3	4	5
CONSEQUENCE		Highly Likely	Likely	Occasionally	Unlikely	Highly Unlikely
A	Catastrophic	Extreme	Extreme	High	High	High
B	Fatal	Extreme	High	High	Medium	Medium
C	Serious	High	High	Medium	Medium	Medium
D	Marginal	High	Medium	Medium	Low	Low
E	Negligible	Medium	Medium	Low	Low	Low

In this case the potential for conflict between a pedestrian and vehicle exiting the driveway at 1 Cedar Court was assessed. The following points are relevant:

- Traffic generation at the access is very low with a peak of 1 vehicle per hour. Pedestrian movements past the access are extremely infrequent. The likelihood of conflict is therefore classified as 'Highly Unlikely'.
- The consequences of collision between pedestrian and exiting vehicle are relatively low. A vehicle exiting the driveway would likely be travelling less than 5-km/h, which is unlikely to result in serious injury. The consequence of collision would therefore be classified as 'Marginal' to 'Negligible'.
- The corresponding hazard risk associated with pedestrian/ vehicular conflict at this location would be classified as 'Low'.

Based on the above assessment I deem the driveway design to be appropriate and safe for its intended use.

3. PA5.1 – Layout of Parking Areas

The proposed on-site car parking consists of 4 garage spaces. Access to the parking spaces is via two garage doors with parking at 90-degrees to the driveway.

Council have requested details of the parking areas in terms of construction and design. The request included B85 vehicle swept paths of entry and exit manoeuvres for all car parking spaces. Figure 5, Figure 6, Figure 7 and Figure 8 demonstrate B85 vehicle swept paths into and out of the four on-site car parking spaces. Note that whilst a B99 vehicle is not required (the B85 vehicle is the appropriate design vehicle for the residential development).

The B85 swept paths clearly demonstrate that all vehicles can enter and exit the parking spaces.

The dimensions of the parking and manoeuvring areas complies with the requirements of AS2890.1 for User Class 1A (residential, domestic and employee parking), which requires minimum dimensions as follows:

- Space width 2.4m
- Space length 5.4m
- Aisle width 5.8m

Figure 5 Parking Bays 1 and 2 Reverse Entry

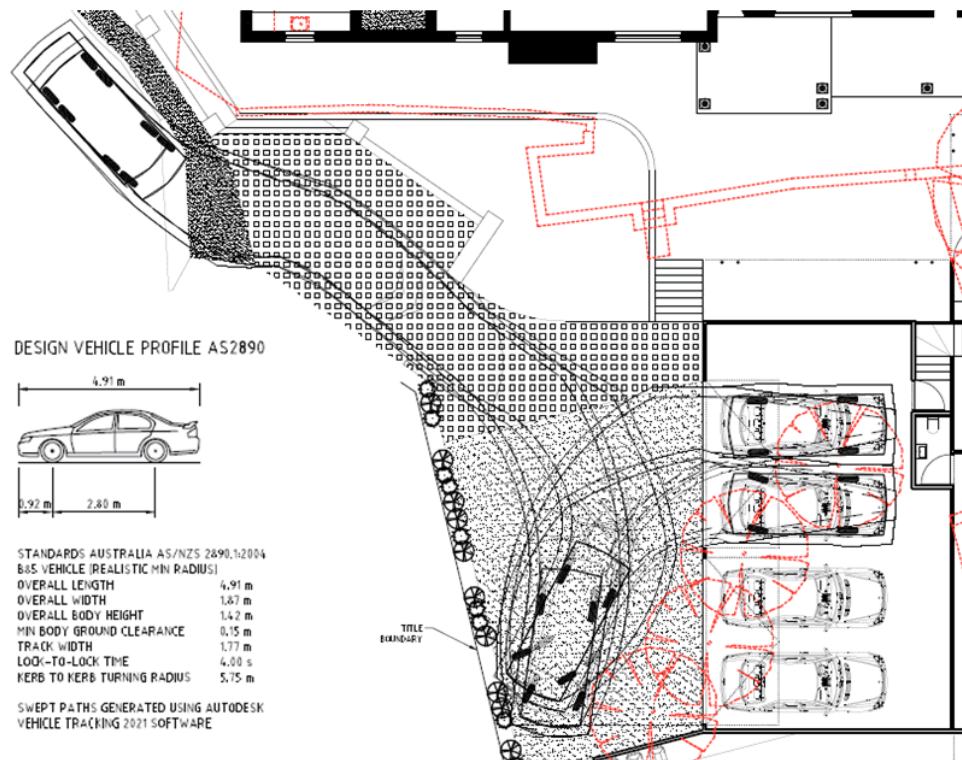


Figure 6 Parking Bays 3 and 4 Forward Entry

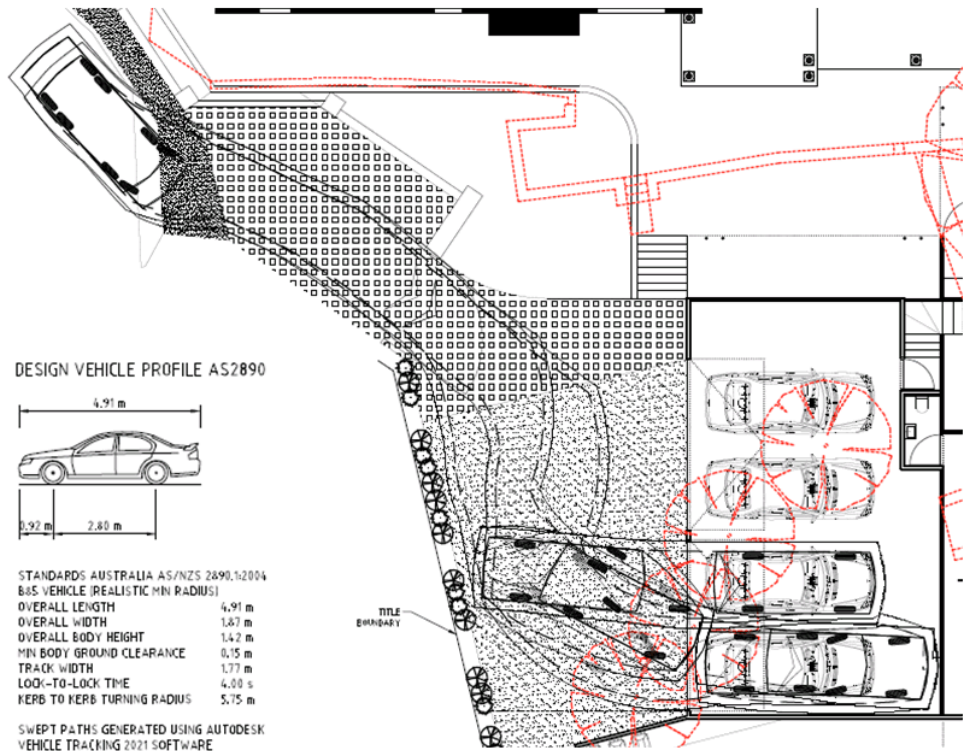


Figure 7 Parking Bays 1 and 2 Forward Exit

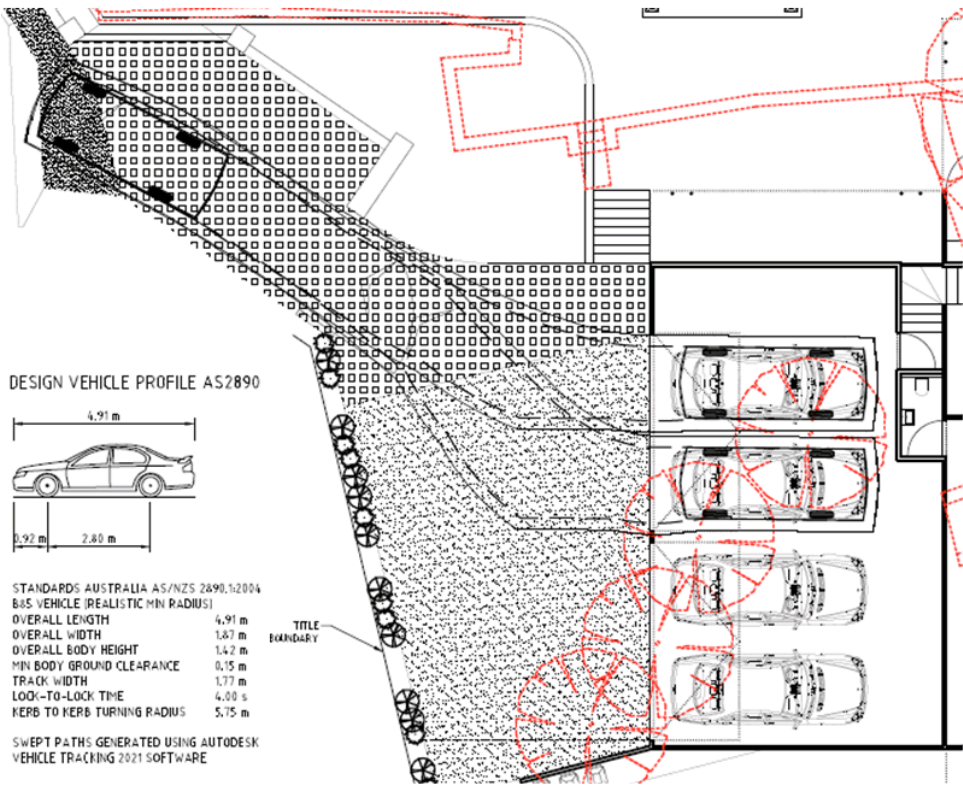
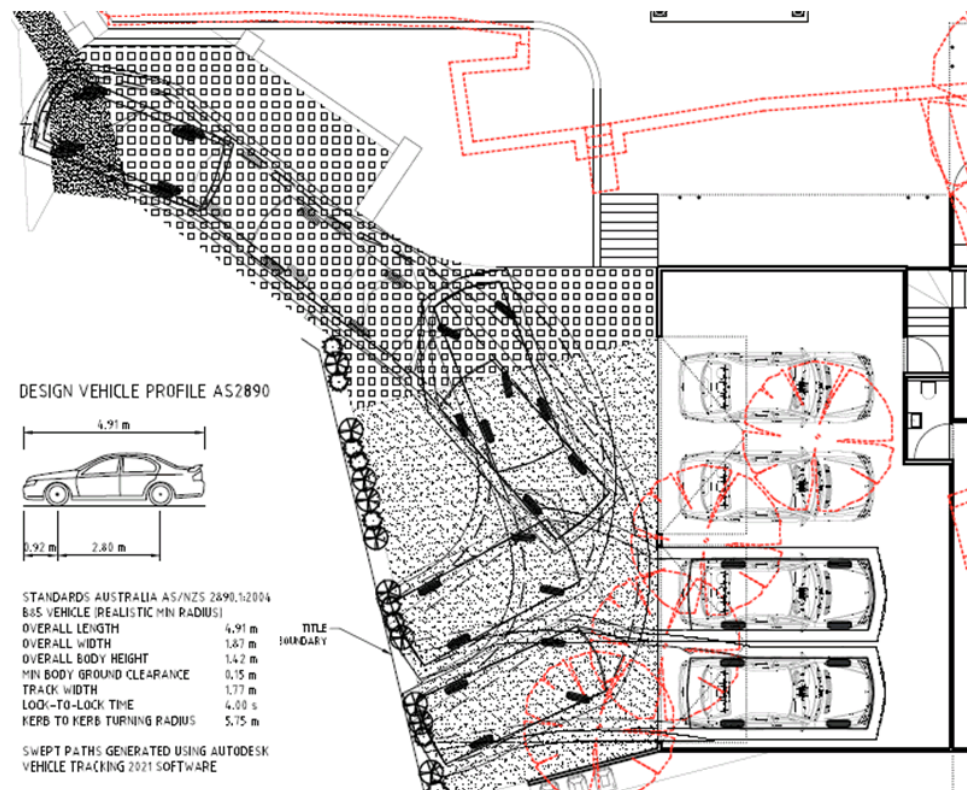


Figure 8 Parking Bays 3 and 4 Reverse Exit

Please contact me on 0437 366 040 if you require any further information.

Yours sincerely,

Keith Midson BE MTraffic MTransport FIEAust CPEng EngExec NER

DIRECTOR
Midson Traffic Pty Ltd



MACHOS PTY LTD T/A NU-JET
ABN: 26 122 088 368
PO BOX 143, ROKEBY TAS 7019
4/73 DROUGHTY POINT RD, ROKEBY TAS 7019
PH: 03 6247 8777
Email: admin@nujet.com.au
Website: www.nujet.com.au

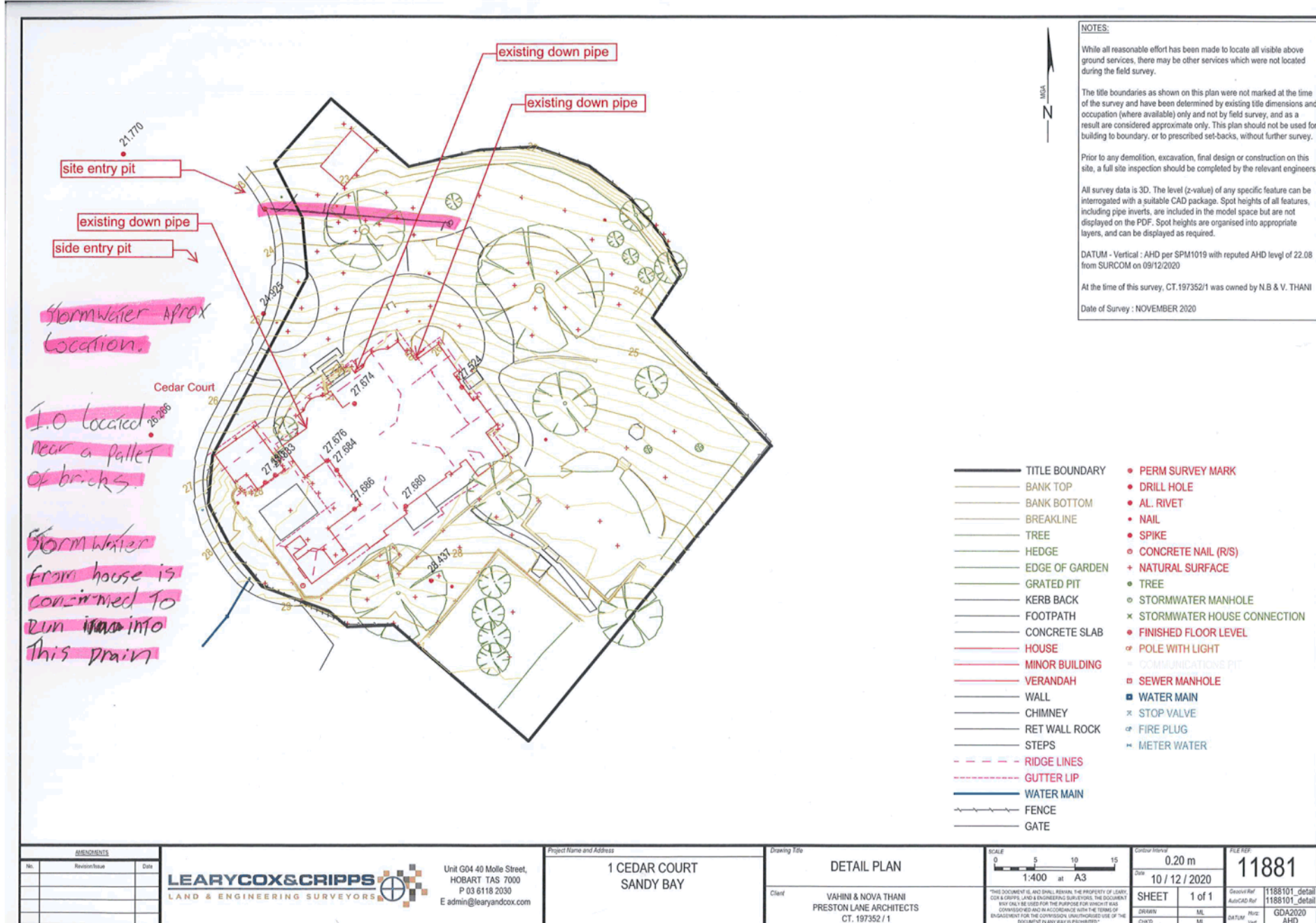
21 September 2021

Nujet attended the site of 1 Cedar Court, Sandy Bay on 18/8/2021 to review the existing storm water connection. Based on the attached WinCan report it is our understanding the storm water of 1 Cedar Court, Sandy Bay is connected to the storm water main as shown on the attached sketch.

Thank you for engaging Nu-Jet to provide this service.

Kind regards,

Administration



**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME 197352	FOLIO 1
EDITION 5	DATE OF ISSUE 04-Nov-2020

SEARCH DATE : 25-May-2021

SEARCH TIME : 03.00 PM

DESCRIPTION OF LAND

City of HOBART

Lot 1 on Plan 197352

Derivation : Part of 9A-2R-38.1/2Ps Gtd to A Andrew
Prior CT 3382/11SCHEDULE 1M851469 TRANSFER to NOVA BHARATH THANI and VAHINI THANI
Registered 04-Nov-2020 at 12.01 PMSCHEDULE 2Reservations and conditions in the Crown Grant if any
BENEFITING EASEMENT: a right of way or passage for Henry
Allport his heirs and assigns and all persons by his
and their permission to go return pass and repass in
through over along and upon the strip of land marked
"Footway" on Plan No. 197352E239393 MORTGAGE to Australia and New Zealand Banking Group
Limited Registered 04-Nov-2020 at 12.02 PMUNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



OWNER		PLAN OF TITLE		Registered Number
FOLIO REFERENCE C.T.3382-11		LOCATION CITY OF HOBART		P197352
GRANTEE		FIRST SURVEY PLAN No. 14-33 TS		APPROVED 09 SEP 1997
		COMPILED BY L.T.O.		<i>M. Sullivan</i> Recorder of Titles
		SCALE 1:1000		LENGTHS IN METRES
MAPSHEET MUNICIPAL CODE No. 114 (5224-12)	LAST UPI No. 210 8977	LAST PLAN No. —	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN	



Enquiries to: City Planning
Phone: (03) 6238 2715
Email: coh@hobartcity.com.au

20 July 2021

Nova Thani
1 Cedar Court
SANDY BAY TAS 7005

mailto:novathani@gmail.com

Dear Sir/Madam

**1 - 7 CEDAR COURT, SANDY BAY & ADJACENT ROAD RESERVE
WORKS IN ROAD RESERVE NOTICE OF LAND OWNER CONSENT TO LODGE A
PLANNING APPLICATION - GMC-21-42**

Site Address:

1 – 7 Cedar Court, Sandy Bay

Description of Proposal:

Partial Demolition, Alterations, Extension, Front Fencing, Garage, Alterations to Access, and
Associated Works/Works in Road Reserve

Applicant Name:

Nova Thani

PLN (if applicable):

PLN-21-388

I write to advise that pursuant to Section 52 of the *Land Use Planning and Approvals Act 1993*, I grant my consent on behalf of the Hobart City Council as the owner/administrator of the above land for you to make application to the City for a planning permit for the development described above and as per the attached documents.

Please note that the granting of the consent is only for the making of the application and in no way should such consent be seen as prejudicing any decision the Council is required to make as the statutory planning authority.

Hobart Town Hall
50 Macquarie Street
Hobart TAS 7000

Hobart Council Centre
16 Elizabeth Street
Hobart TAS 7000

City of Hobart
GPO Box 503
Hobart TAS 7001

T 03 6238 2711
F 03 6234 7109
E coh@hobartcity.com.au
W hobartcity.com.au

CityofHobartOfficial
ABN 39 055 343 428
Hobart City Council

This consent does not constitute an approval to undertake any works and does not authorise the owner, developer or their agents any right to enter or conduct works on any Council managed land whether subject to this consent or not.

If planning approval is granted by the planning authority, you will be required to seek approvals and permits from the City as both landlord, land manager, or under other statutory powers (such as other legislation or City By-Laws) that are not granted with the issue of a planning permit under a planning scheme. This includes the requirement for you to reapply for a permit to occupy a public space under the City's Public Spaces By-law if the proposal relates to such an area.

Accordingly, I encourage you to continue to engage with the City about these potential requirements.

Yours faithfully



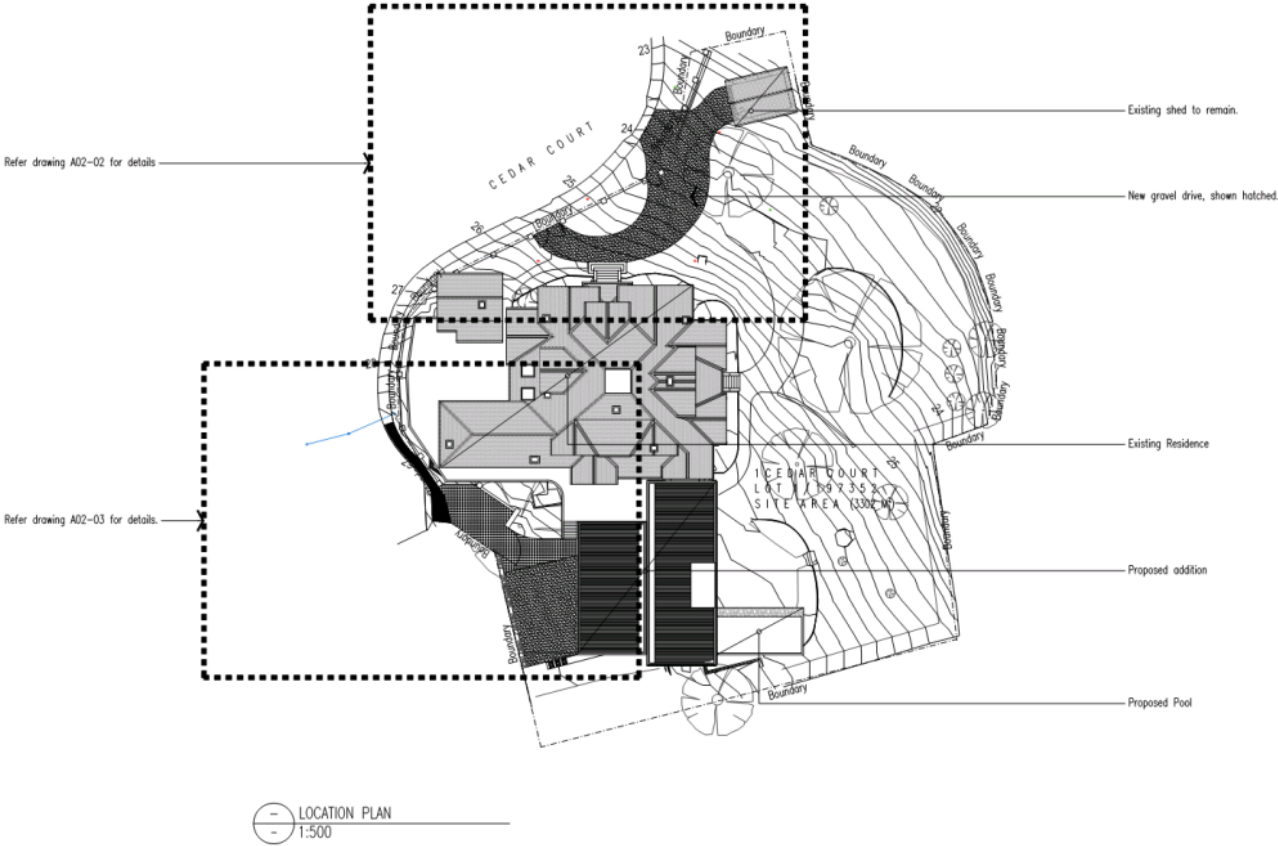
(Kelly Grigsby)

Chief Executive Officer being the General Manager as appointed by Council pursuant to section 61 of the Local Government Act 1993 (Tas)

Relevant documents/plans:

Plans - Preston Lane

Approved - General
Manager Consent Only
GMC-21-42 20/07/2021



LOCATION OF ALL NEIGHBOURING STRUCTURES ARE INDICATIVE ONLY



Hobart
45 Goodburn Street Hobart TAS 7000
T 61 3 6331 2923
AOC OC3079
Melbourne
9 Throli Road South Yarra VIC 3141
T 61 3 9627 8962
info@prestonlane.com.au
prestonlane.com.au

The Builder/Contractor shall verify all dimensions prior to any work commencing. Figure dimensions shall take precedence over scaled work.
No part of this drawing shall be reproduced or otherwise dealt with without the prior written consent of Preston Lane.



Proprietor	NOVA AND VAHINI THANI			
Project	1 CEDAR COURT SANDY BAY			
Drawing	SITE PLAN			
Scale	1:500 @ A3			
Revision				
K	26/04/2021	Issued for client review	BT	DL
V	18/05/2021	Issued for client approval	BT	DL
M	20/05/2021	Issued for client approval	BT	DL
B	31/05/2021	Issued for DP	BT	DL
D	21/06/2021	Issued for PM consent	BT	DL
P	01/07/2021	PM consent BT response	BT	DL
Project No	20080			

Drawing Number

A00-03

PRELIMINARY NOT FOR CONSTRUCTION

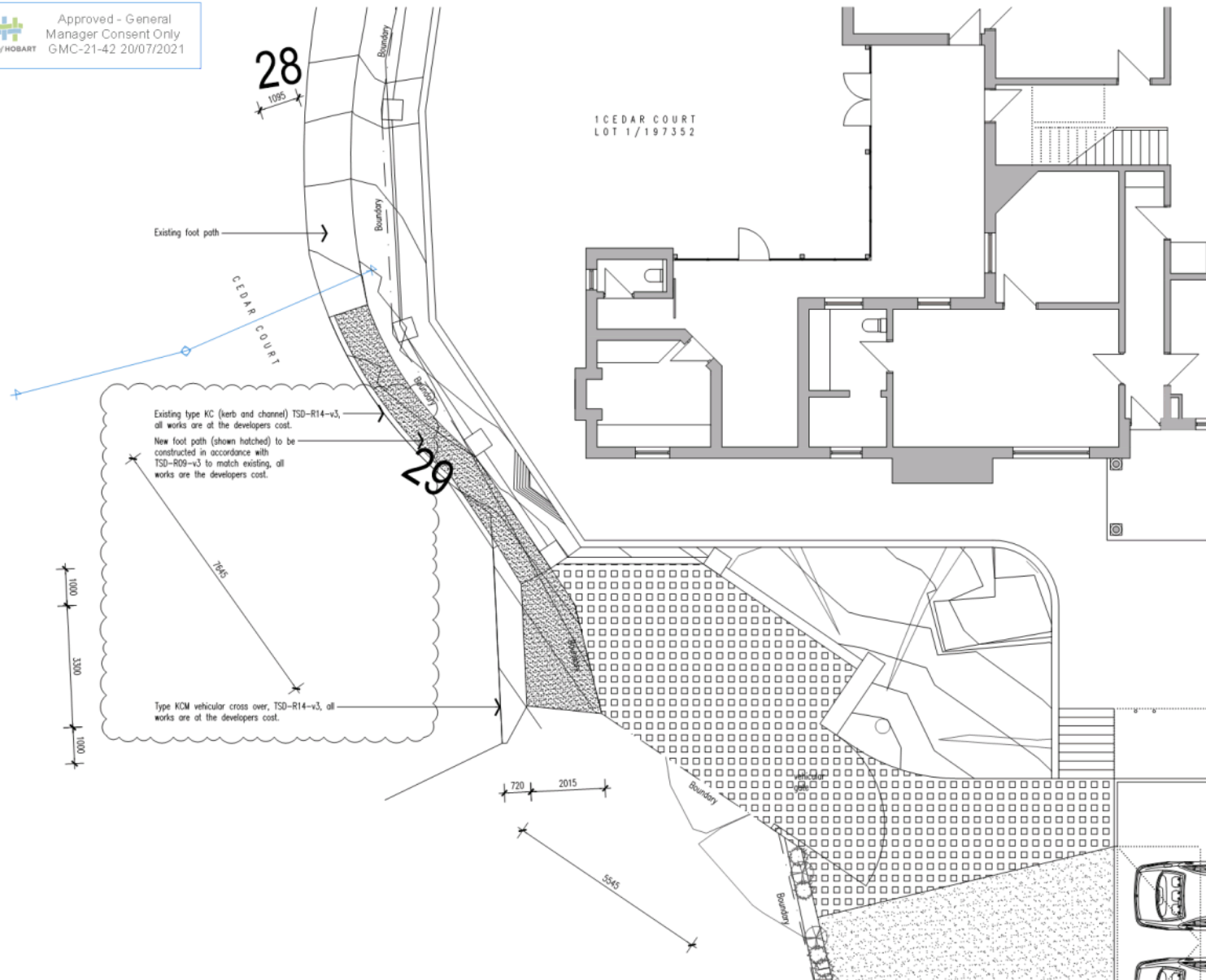


PRELIMINARY NOT FOR CONSTRUCTION

A02-02

A02-02

Approved - General
Manager Consent Only
GMC-21-42 20/07/2021



NOTE
Refer drawing A00-03 for location.

LOCATION OF ALL NEIGHBOURING STRUCTURES ARE INDICATIVE ONLY



Robert
45 Goulburn Street Hobart TAS 7000
T 61 3 6231 2923
AOC OC30179
Melbourne
9 Throli Road South Yarra VIC 3141
T 61 3 9627 0902
info@prestonlane.com.au
prestonlane.com.au

The Builder/Contractor shall verify all dimensions prior to any work commencing. Figure dimensions shall take precedence over scaled work.

One part of this drawing shall be reproduced or otherwise used without the prior written consent of Preston Lane.



Proprietor	NOVA AND VAHINI THANI		
Project	1 CEDAR COURT SANDY BAY		
Drawing	FLOOR PLAN		
Scale	1:100 @ A3		
Revision			
R	26/03/2021	Issued for client review	BT DL
M	18/03/2021	Issued for client approval	BT DL
M	20/05/2021	Issued for client approval	BT DL
R	31/05/2021	Issued for DP	BT DL
D	21/06/2021	Issued for PM consent	BT DL
P	01/07/2021	PM consent BT/assessme	BT DL
Project No	20080		

Drawing Number

A02-03

PRELIMINARY NOT FOR CONSTRUCTION

Planning: #234012

Property

1-7 CEDAR COURT SANDY BAY TAS 7005

People

Applicant

Nova Thani
1 Cedar Court
SANDY BAY TAS 7005
0403317536
novathani@gmail.com

Owner

Nova Thani
1 Cedar Court
SANDY BAY TAS 7005
0403317536
novathani@gmail.com

Entered By

DANIEL LANE
45 GOULBURN STREET
HOBART TAS 7000
03 6231 2923
info@prestonlane.com.au

Use

Single dwelling

Details

Have you obtained pre application advice?

Yes

If YES please provide the pre application advice number eg PAE-17-xx

Helena Ayres

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. If you are not the owner of the property you MUST include signed confirmation from the owner that they are aware of this application.

No

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the

number of signs under Other Details below.

☐ No

If this application is related to an enforcement action please enter Enforcement Number

Details

What is the current approved use of the land / building(s)?

Residential

Please provide a full description of the proposed use or development (i.e. demolition and new dwelling, swimming pool and garage)

Alterations and additions to existing dwelling

Estimated cost of development

85000.00

Existing floor area (m2)	Proposed floor area (m2)	Site area (m2)
545.00	775.00	3302

Carparking on Site

Total parking spaces Existing parking spaces ☐ Other (no selection chosen)

4 2

Other Details

Does the application include signage?

☐ No

How many signs, please enter 0 if there are none involved in this application?

0

Tasmania Heritage Register

Is this property on the Tasmanian Heritage Register?

☐ Yes

Documents

Required Documents

Title (Folio text and Plan and Schedule of Easements)

Title combined.pdf

Plans (proposed, existing)

20080 210608 issued for DA.pdf

Covering Letter

20080 210607 I Cedar Court - Supporting Statement Letter.pdf

Supporting Documents

Traffic Impact Assessment

I Cedar Court Expert Opinion.pdf



Tasmanian Heritage Council
GPO Box 618 Hobart Tasmania 7000
Tel: 1300 850 332
enquiries@heritage.tas.gov.au
www.heritage.tas.gov.au

PLANNING REF: PLN-21-388
THC WORKS REF: 6640
REGISTERED PLACE NO: 3428
FILE NO: 07-21-33THC
APPLICANT: Nova Thani
DATE: 10 January 2022

NOTICE OF HERITAGE DECISION

(*Historic Cultural Heritage Act 1995*)

The Place: 'The Gables', 1 Cedar Court, Sandy Bay.
Proposed Works: Partial demolition, alterations and extension, new building, front fencing, solar panels and landscaping work.

Under section 39(6)(b) of the *Historic Cultural Heritage Act 1995*, the Heritage Council gives notice that it consents to the discretionary permit being granted in accordance with the documentation submitted with Development Application PLN-21-388, advertised on 17/12/2021, subject to the following conditions:

1. **Any concrete floors for the enclosed verandah and the new building must be detailed such that the junctions between the slab and existing masonry walls are constructed in a manner that:**

(i) Does not result in the transfer of moisture or the introduction of soluble salts to the existing masonry walls; and,

(ii) Incorporates a porous strip of minimum 300mm width alongside the base of the masonry wall, enabling the evaporation of moisture from the ground at the base of the wall; or other detail having similar effect, to the satisfaction of Heritage Tasmania's Works Manager.

Reason for condition

To avoid any circumstances that may cause or exacerbate rising damp in original masonry walls of the heritage building.

2. **The existing timber lining of the ceiling of the original dining room must be retained.**

Reason for condition.

To ensure significant fabric of the place is conserved.

3. **The mature tree located between the residence and the new driveway area (Site Plan A00-02 notated as 'exTree' to the south-east of the existing rumpus room) must be retained and protected from damage during the works. Any new landscaping treatment located within the**

drip line of the tree, including the proposed driveway, must be designed and constructed in a manner that promotes the tree's continued health and vigour.

Reason for condition

To ensure that culturally significant trees are not compromised by the development, consistent with the appropriate outcomes in Section 13 of the Works Guidelines.

Please ensure the details of this notice, including conditions, are included in any permit issued, and forward a copy of the permit or decision of refusal to the Heritage Council for our records.

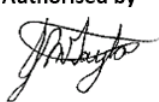
Should you require clarification of any matters contained in this notice, please contact Heritage Tasmania's Works Manager, Ian Boersma, on 0429 979 586 or 1300 850 332.



Ian Boersma
Works Manager – Heritage Tasmania
Under delegation of the Tasmanian Heritage Council



Submission to Planning Authority Notice

Council Planning Permit No.	PLN-21-388	Council notice date	26/07/2021
TasWater details			
TasWater Reference No.	TWDA 2021/01237-HCC	Date of response	27/07/2021
TasWater Contact	Jake Walley	Phone No.	0467 625 805
Response issued to			
Council name	CITY OF HOBART		
Contact details	coh@hobartcity.com.au		
Development details			
Address	1 CEDAR CT, SANDY BAY	Property ID (PID)	5620989
Description of development	Alterations and additions to existing dwelling		
Conditions			
Pursuant to the <i>Water and Sewerage Industry Act 2008 (TAS)</i> Section 56P(1) TasWater does not object to the proposed development and no conditions are imposed.			
Advice			
General For information on TasWater development standards, please visit http://www.taswater.com.au/Development/Development-Standards For application forms please visit http://www.taswater.com.au/Development/Forms			
Declaration			
The drawings/documents and conditions stated above constitute TasWater's Submission to Planning Authority Notice.			
Authorised by  Jason Taylor Development Assessment Manager			
TasWater Contact Details			
Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au

Application Referral Cultural Heritage - Response

From:	Sarah Waight
Recommendation:	Proposal is acceptable subject to conditions.
Date Completed:	
Address:	1 - 7 CEDAR COURT, SANDY BAY ADJACENT ROAD RESERVE
Proposal:	Partial Demolition, Alterations, Extension, Front Fencing, Garage, Alterations to Access, and Associated Works
Application No:	PLN-21-388
Assessment Officer:	Helen Ayers,

Referral Officer comments:

This application is for demolition and an extension to a place that is heritage listed in table E13.1 of the Historic Heritage Code of the Scheme.

The place is known as 'The Gables' and was designed by Melbourne architect Chris Cowper and constructed in 1911. It is a significant building and was the home of Henry Allport for some of its time. Henry Allport is well known for various reasons including the fact that he bequeathed the Allport collection of decorative arts, rare books and art and other items to the people of Tasmania in 1965, a collection that remains one of the most generous in Tasmania's short European history. This collection was once kept in this house and items including the chandeliers from the house are now part of the Allport Library and Museum of Fine Arts.

The house has numerous original features and is a one of the most extravagant examples of Federation Queen Anne architecture in Hobart, with numerous gables, terra cotta roof, ornate ridge tiles and gargoyle finials, tuck pointed brickwork, bay windows, shingles, prominent and highly ornate chimneys. Inside, the house has extensive and grand wood paneling, plate rails, extensive timber paneled doors and ornate ceiling details as well as Art Nouveau detailing on door handles and tiles. Surprisingly, the internal staircase is relatively modest and a close examination of it indicates that it has been modified in recent decades with the introduction of balusters with love hearts a decorative feature that is not consistent with other timber detailing. Some other alterations that were made in the 1970s and 1980s include altered tiling in the bathrooms, new fixtures and fittings in the kitchen and bathroom. The land (3302m²) on which the house sits once had a driveway from Maning Ave. It was a large internal and private home with expansive hedges (these are specifically heritage listed) with a tennis court to the rear. The block was subdivided in the post-war period (date unknown, but possibly 1960s/70s) with a cul-de-sac that extends around the side of the house. The front entrance of the house faces Cedar Court and has no front fence. The western side elevation has a recent 1.8 m high paling fence and is a side boundary fence.

This proposal follows on from a previous and earlier application and permit issued (PLN-17-613) for internal and external changes including the reconfiguration of rooms and connections between rooms and the introduction of new elements. Since that permit was issued, the property has changed hands and some of the already approved changes have not proceeded. A number of conditions were included in the permit issued. HER s3 and HER s4 must be included on any permit issued.

This application has some minor demolition, but the vast majority of the application is for new work, a new front fence, a large rear extension for a new kitchen, 4 car garage, gym, store and the enclosure of an existing/original verandah of the heritage part of the house. Also part of the application is a new rear vehicular gate and driveway, courtyard and minor landscaping, as well as the resurfacing of the front semi-circular driveway. It should be noted that the new kitchen which was relocated as part of the PLN-17-613 application is to be demolished and that room will be a TV room.

The following provisions of the Historic Heritage Code of the Scheme apply; E13.7.1 P1 - demolition and E13.7.2 P1, P2, P3, P4 and P5 - new work - extension and front fencing.

Clause E13.7.1 P1 states:

Demolition must not result in the loss of significant fabric, form, items, outbuildings or landscape elements that contribute to the historic cultural heritage significance of the place unless all of the following are satisfied;

- (a) there are, environmental, social, economic or safety reasons of greater value to the community than the historic cultural heritage values of the place;*
- (b) there are no prudent and feasible alternatives;*
- (c) important structural or façade elements that can feasibly be retained and reused in a new structure, are to be retained;*
- (d) significant fabric is documented before demolition.*

Assessment:

Demolition involves the 2018 kitchen, the external south-east wall of the existing dining room, the timber paling boundary fence (installed in 2018), stone retaining walls, steps, concrete retaining wall (to remnants of rear tennis court) and rear elements of landscaping including trees.



External wall to be demolished between the existing dining and new kitchen.

The proposed demolition relates to what was a glazed flower room or conservatory, which was converted to a kitchen and more recently as a dining room. Demolition is proposed to remove the wall shown in the above image to allow for connection through to the new kitchen and garage wing and will involve the removal of brick, sandstone and glazing. Although there is no concern about the removal of the sandstone as this is later infill from the post Allport era the demolition of the brick is unfortunate, particularly given the intact state of the house as a self-contained large house with no accretions or additions. As a particular large house to start with, it is difficult as such to conceive that any addition is required. However, this application must be assessed against the relevant provisions and determine if the demolition results in the loss of heritage values. In regard to the location of the proposed demolition, it is to the rear elevation, part of the functional, rather than dress circle part of the house which is potentially the most logical or rational location for a connection to another building/extension should one be needed. The retention of the character of red ochre and black tuck pointing brick work is considered appropriate. It is considered that a condition of permit be included to ensure that its original wall finishes and details are retained.

The remnant concrete foundations of the tennis court and other sandstone elements of walls and steps will be demolished to make way for the large extension to the rear. The tennis court has been subsumed by the the creation of the Cedar Court cul-de-sac subdivision and and subsequent new house at 9 Cedar Court. Other sandstone features in the garden are from the era of the house but its positioning and the techniques employed suggest that it has been repositioned over the course of the last sixty years. It is recommended that all sandstone and red brick from the demolished low retaining wall at the rear, remain on site and be reused in landscaping. This can be achieved by a condition of permit.

New work

The new work includes:

- new single storey extension and addition to the south east of the original house, built over two levels for a four car garage, kitchen, mud room, swimming pool, store and gym etc, associated vehicle hard stand and gates and driveway and footpath.
- new skylight within the verandah to the south west part of the original house.
- new front fence and side fence

The new proposal must be assessed against the following clauses:

E13.7.2 P1

Development must not result in any of the following:

- (a) loss of historic cultural heritage significance to the place through incompatible design, including in height, scale, bulk, form, fenestration, siting, materials, colours and finishes;*
- (b) substantial diminution of the historic cultural heritage significance of the place through loss of significant streetscape elements including plants, trees, fences, walls, paths, outbuildings and other items that contribute to the significance of the place.*

E13.7.2 P2

Development must be designed to be subservient and complementary to the place through characteristics including:

- (a) scale and bulk, materials, built form and fenestration;*
- (b) setback from frontage;*
- (c) siting with respect to buildings, structures and listed elements;*
- (d) using less dominant materials and colours.*

E13.7.2 P3

Materials, built form and fenestration must respond to the dominant heritage characteristics of the place, but any new fabric should be readily identifiable as such.

E13.7.2 P5

New front fences and gates must be sympathetic in design, (including height, form, scale and materials), to the style, period and characteristics of the building to which they belong.

Assessment:

The proposed front fence is a stucco and painted finished brick pier with a wrought iron infill sections that take their design cues from the existing metal gates which are being relocated to the north elevation. The colour of the paint is described as 'calf skin' a light-mid brown grey colour, no doubt chosen to tie in with the new colour scheme to the house. The fence piers have a maximum height of approximately 2.3 metres and minimum of 1.8 metres around the full extent of the proposed fence. The plinth has a height of approximately 0.3 metres. As such, the fence does not follow the convention of a lower fence at the front allowing the house to be shown off to its full advantage in a traditional fashion. In this instance, the proposed fence is considered too high for the setting although the proposed design, which takes its cues from the existing metal gate, is a valid approach. It is appropriate for a condition of permit to reduce the height of the piers on the front fence as shown in the west elevation and north elevation to 1.5 metres. This can be achieved as a condition of permit.

The existing semi-circular driveway is being retained, and while the existing plans indicate that this driveway will not be used for parking, the proposed configuration indicates that it will still remain as such. The only change is the resurfacing of the semi-circular driveway from pavers to asphalt and concrete to the rear. A condition of permit to specify the colour of the concrete to the rear is appropriate.

The extension to the rear, although large in footprint, is separated by a recess allowing the corner window of the existing dining room to remain. The garage and kitchen extension is over

two levels, the garage sited higher on the 'tennis court' level. Both are box-like and finished in stucco and painted brickwork and red brick with white steel window frames. This approach is typical of the output of this designers in that there is the production of a contemporary, minimalist and sleek modern product. In this regard it does not seek to emulate or replicate the exuberant architecture of the Gables.

The proposal shows a limestone strip separating the original rear verandah and the new courtyard. This is acceptable, but greater clarity is required to ensure that the step up to the verandah remains. This can be achieved by a condition of permit.



Existing rear verandah with step up from existing paving.

The proposal with appropriate conditions of permit satisfies the above provisions of the Historic Heritage Code of the Scheme.

Sarah Waight
Senior Cultural Heritage Officer
11 Jan 2022

**7.1.5 30 MCROBIES ROAD, SOUTH HOBART - OUTBUILDING
(STORAGE SHED)
PLN-21-492 - FILE REF: F22/4022**

Address: 30 McRobies Road, South Hobart
Proposal: Outbuilding (Storage Shed)
Expiry Date: 14 February 2022
Extension of Time: Not applicable
Author: Mark O'Brien

RECOMMENDATION

That pursuant to the *Hobart Interim Planning Scheme 2015*, the Council approve the application for outbuilding (storage shed) at 30 McRobies Road, South Hobart 7004 for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-21-492 - 30 MCROBIES ROAD SOUTH HOBART TAS 7004 - Final Planning Documents, except where modified below.

Reason for condition

To clarify the scope of the permit.

ENG sw1

All stormwater from the proposed development (including but not limited to: roofed areas, ag drains, retaining wall ag drains and impervious surfaces such as driveways and paved areas) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Advice:

Under section 23 of the Urban Drainage Act 2013 it is an offence

for a property owner to direct stormwater onto a neighbouring property.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or
2. Be repaired and reinstated by the owner to the satisfaction of the Council.

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENV 1

Sediment and erosion control measures sufficient to prevent sediment from leaving the site must be installed prior to any disturbance of the site, and maintained until all areas of disturbance have been stabilised or re-vegetated.

Advice:

For further guidance in preparing a Soil and Water Management Plan – in accordance with Fact sheet 3 Derwent Estuary Program click [here](#).

Reason for condition

To avoid the sedimentation of roads, drains, natural watercourses, Council land that could be caused by erosion and runoff from the development, and to comply with relevant State legislation.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations, codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

STORMWATER




Please note that in addition to a building and/or plumbing permit, development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.

- Attachment A: PLN-21-492 - 30 MCROBIES ROAD SOUTH
HOBART TAS 7004 - Planning Committee or
Delegated Report ↓ 
- Attachment B: PLN-21-492 - 30 MCROBIES ROAD SOUTH
HOBART TAS 7004 - CPC Agenda Documents ↓

- Attachment C: PLN-21-492 - 30 MCROBIES ROAD SOUTH
HOBART TAS 7004 - Planning Referral Officer
Environmental Development Planner Report ↓ 

**APPLICATION UNDER HOBART INTERIM PLANNING SCHEME 2015**

Type of Report: Committee
Council: 24 January 2022
Expiry Date: 14 February 2022
Application No: PLN-21-492
Address: 30 MCROBIES ROAD , SOUTH HOBART
Applicant: (TIIFRENO BUILDERS)
PO Box 302
PO Box 302
Proposal: Outbuilding (Storage Shed)
Representations: Zero
Performance criteria: Potentially Contaminated Land Code; Landslide Code; Waterway and Coastal Protection Code

1. Executive Summary

- 1.1 Planning approval is sought for Outbuilding (Storage Shed) at 30 Mcrobies Road, South Hobart.
- 1.2 More specifically the proposal includes:
- A new storage shed at the Resource Tip Shop in South Hobart.
 - The shed would be sited at the rear of the Tip Shop site, beside the public drop off area and would replace a previous shed that was recently destroyed by fire.
 - The proposed shed would have an area of 200m² and a maximum height of 5.42m to the peak of the gable roof.
- 1.3 The proposal relies on performance criteria to satisfy the following standards and codes:
- 1.3.1 Potentially Contaminated Land Code
 - 1.3.2 Landslide Code
 - 1.3.3 Waterway and Coastal Protection Code
- 1.4 No representations were received during the statutory advertising period between 30 November 2021 and 14 December 2021.

- 1.5 The proposal is recommended for approval subject to conditions.
- 1.6 The final decision is delegated to the Council because the application involves works on Council land.

2. Site Detail

- 2.1 The subject site is part of the larger Mcrobies Gully Waste Management Centre and is associated with the Resource Tip Shop in the southern end of the site.

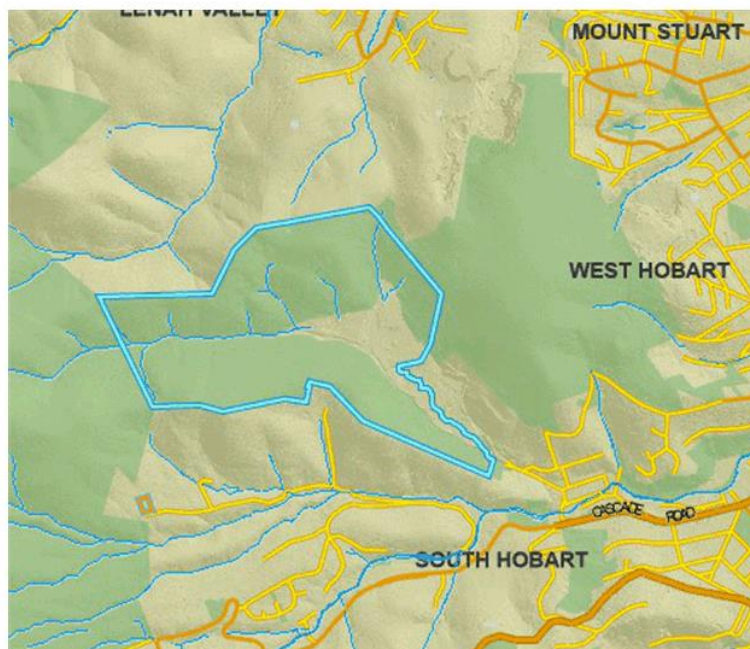


Figure 1: Location of the subject site at 30 Mcrobies Road, South Hobart (outlined in blue).



Figure 2: the subject site at 30 Mcrobies Road, South Hobart (outlined in blue).

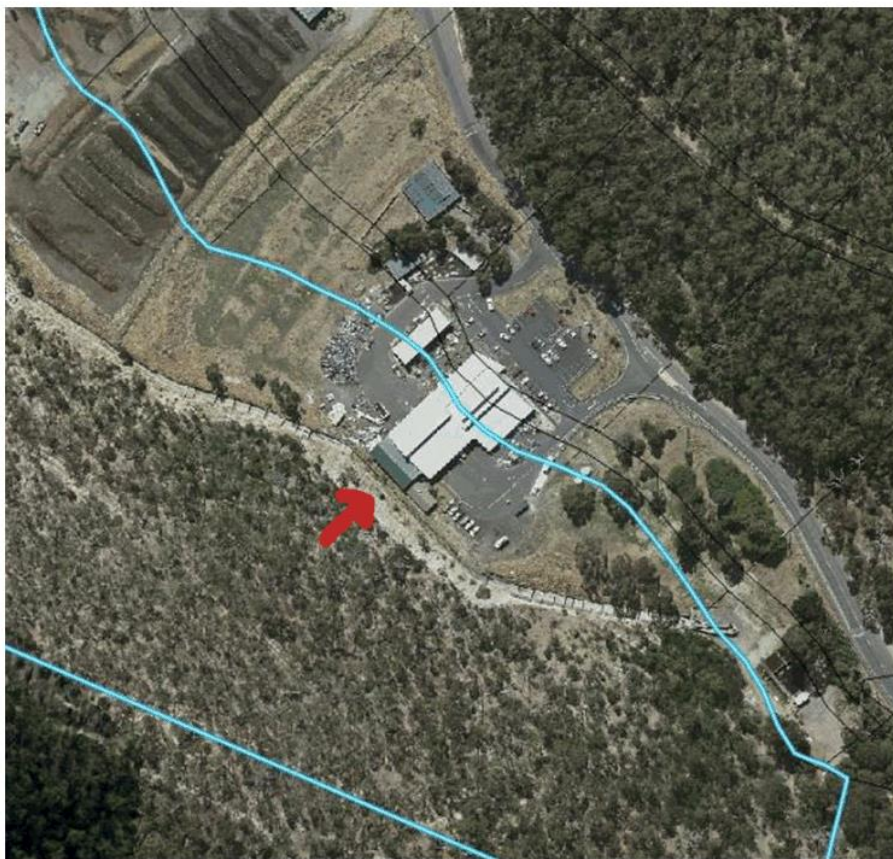


Figure 3: the subject site at 30 Mcrobies Road, South Hobart (outlined in blue). The location of the proposed shed is indicated by the red arrow. This is an older image showing the site before the fire which burnt the shed which the proposed shed would replace.

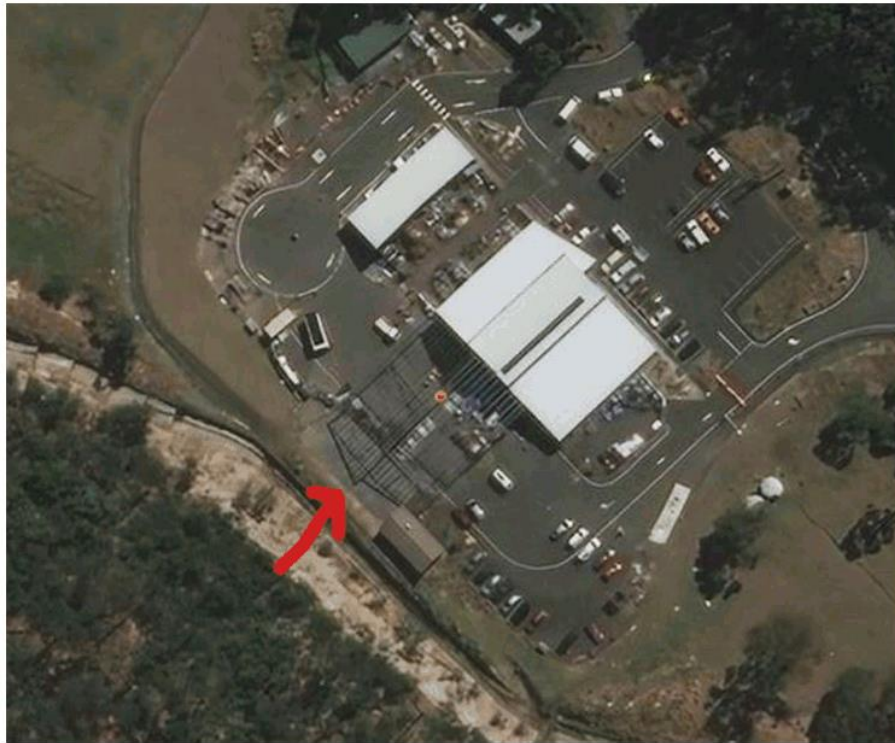


Figure 4: the subject site at 30 Mcrobies Road, South Hobart (outlined in blue). The location of the proposed shed is indicated by the red arrow. This is a recent image showing the site after the fire which burnt the shed which the proposed shed would replace.

- 2.2 It was considered that a site visit was not required as there were no discretions under the development standards for the zone.

3. Proposal

- 3.1 Planning approval is sought for Outbuilding (Storage Shed), at 30 Mcrobies Road, South Hobart.
- 3.2 More specifically the proposal is for:
- A new storage shed at the Resource Tip Shop in South Hobart.
 - The shed would be sited at the rear of the Tip Shop site, beside the public drop off area and would replace a previous shed that was recently destroyed by fire.
 - The proposed shed would have an area of 200m² and a maximum height of 5.42m to the peak of the gable roof.



Figure 5: location of the proposed storage shed at 30 Mcrobies Road, South Hobart.

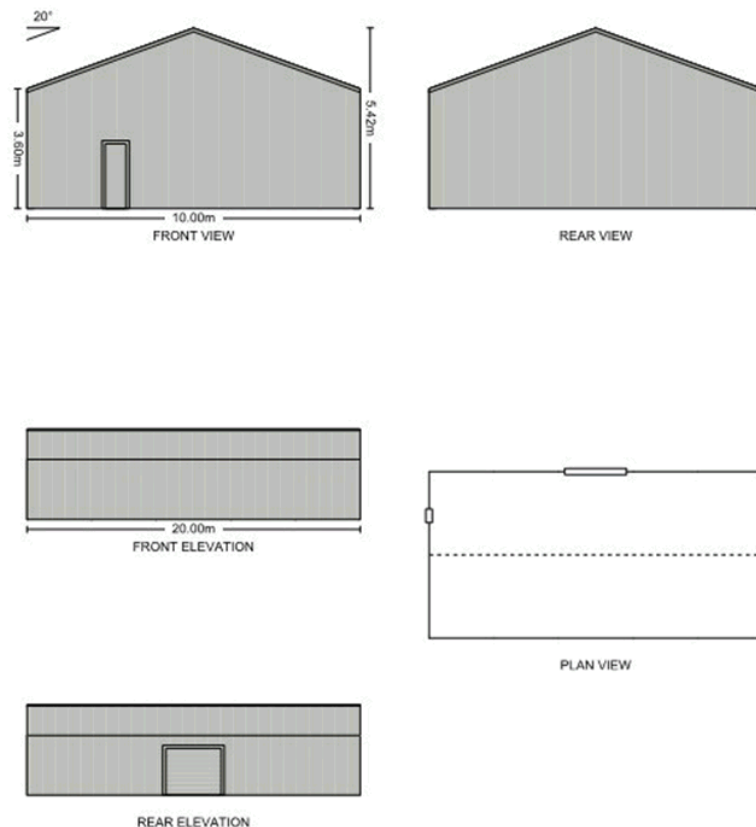


Figure 6: Elevation and floor plan of the proposed storage shed at 30 Mcrobies Road, South Hobart.

4. Background

- 4.1 This application is for a storage shed, which is to replace a shed that was destroyed by fire.

5. Concerns raised by representors

- 5.1 No representations were received during the statutory advertising period between 30 November 2021 and 14 December 2021.

6. Assessment

- 6.1 The *Hobart Interim Planning Scheme 2015* is a performance based planning

scheme. To meet an applicable standard, a proposal must demonstrate compliance with either an acceptable solution or a performance criterion. Where a proposal complies with a standard by relying on one or more performance criteria, the Council may approve or refuse the proposal on that basis. The ability to approve or refuse the proposal relates only to the performance criteria relied on.

6.2 The site is located within the Utilities of the *Hobart Interim Planning Scheme 2015*.

6.3 The existing and proposed use is Recycling and Waste Disposal, which is a permitted use in the zone.

6.4 The proposal has been assessed against:

6.4.1 Part D - 28 Utilities Zone

6.4.2 E2.0 Potentially Contaminated Land Code

6.4.3 E3.0 Landslide Code

6.4.4 E6.0 Parking and Access Code

6.4.5 E7.0 Stormwater Management Code

6.4.6 E9.0 Attenuation Code

6.4.7 E11.0 Waterway and Coastal Protection Code

6.5 The proposal relies on the following performance criteria to comply with the applicable standards:

6.5.1 Potentially Contaminated Land Code:

Excavation – E2.6.2 P1

6.5.2 Landslide Code:

Buildings and works in a landslide hazard area - E3.7.1 P1

6.5.3 Waterway and Coastal Protection Code:

Building and works in a waterway protection area - E11.7.1 P1

6.6 Each performance criterion is assessed below.

- 6.7 Excavation in potentially contaminated land - E2.6.2 P1
- 6.7.1 There is no acceptable solution for clause E2.6.2 A1.
- 6.7.2 The proposal includes excavation in potentially contaminated land.
- 6.7.3 There is no acceptable solution; therefore, assessment against the performance criterion is relied on.
- 6.7.4 The performance criterion at clause E2.6.2 P1 provides as follows:
- Excavation does not adversely impact on health and the environment, having regard to:*
- (a) an environmental site assessment that demonstrates there is no evidence the land is contaminated; or*
- (b) a plan to manage contamination and associated risk to human health and the environment that includes:*
- (i) an environmental site assessment;*
- (ii) any specific remediation and protection measures required to be implemented before excavation commences; and*
- (iii) a statement that the excavation does not adversely impact on human health or the environment.*
- 6.7.5 The application was referred to Council's Senior Environmental Health Officer, who has determined that the proposal will not adversely impact on health or the environment. The Environmental Site Assessment submitted in support of the proposal concludes that the contamination levels are very low and will not pose risks to the environment or workers.
- 6.7.6 The proposal complies with the performance criterion.
- 6.8 Buildings and works in a landslide hazard area - E3.7.1 P1
- 6.8.1 There is no acceptable solution for clause E3.7.1 A1.
- 6.8.2 The proposal includes buildings and works in a landslide hazard area.
- 6.8.3 There is no acceptable solution; therefore assessment against the

performance criterion is relied on.

- 6.8.4 The performance criterion at clause E3.7.1 P1 provides as follows:

Buildings and works must satisfy all of the following:

(a) no part of the buildings and works is in a High Landslide Hazard Area;

(b) the landslide risk associated with the buildings and works is either:

(i) acceptable risk; or

(ii) capable of feasible and effective treatment through hazard management measures, so as to be tolerable risk.

- 6.8.5 The application was referred to Council's Environmental Development Planner, who has determined that the proposal presents an acceptable risk. No part of the development is in a high landslide hazard area and Council's debris flow modelling does not identify any debris flow risk.

- 6.8.6 The proposal complies with the performance criterion.

6.9 Buildings and works in a waterway protection area - E11.7.1 P1

- 6.9.1 The acceptable solution for clause E11.7.1 A1 requires the development to be sited inside a building area on the title.

- 6.9.2 The proposal includes development that is not inside a building area on the title as there is not such area identified.

- 6.9.3 The proposal does not comply with the acceptable solution; therefore, assessment against the performance criterion is relied on.

- 6.9.4 The performance criterion at clause E11.7.1 P1 provides as follows:

Building and works within a Waterway and Coastal Protection Area must satisfy all of the following:

(a) avoid or mitigate impact on natural values;

(b) mitigate and manage adverse erosion, sedimentation and runoff impacts on natural values;

(c) avoid or mitigate impacts on riparian or littoral vegetation;

(d) maintain natural streambank and streambed condition, (where it exists);

(e) maintain in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation;

(f) avoid significantly impeding natural flow and drainage;

(g) maintain fish passage (where applicable);

(h) avoid landfilling of wetlands;

(i) works are undertaken generally in accordance with 'Wetlands and Waterways Works Manual' (DPIWE, 2003) and "Tasmanian Coastal Works Manual" (DPIPWE, Page and Thorp, 2010), and the unnecessary use of machinery within watercourses or wetlands is avoided.

6.9.5 The application was referred to Council's Environmental Development Planner, who has determined that the proposed use and development will have no impact on riparian vegetation, streambank condition, natural water flows or in-stream habitat. Standard soil and water management measures will also ensure that any potential construction impacts on the waterway are mitigated.

6.9.6 The proposal complies with the performance criterion.

7. Discussion

- 7.1 Planning approval is sought for Outbuilding (Storage Shed) at 30 Mcrobies Road, South Hobart.
- 7.2 The application was advertised and no representations were received.
- 7.3 The proposal has been assessed against the relevant provisions of the planning scheme and is considered to perform well.
- 7.4 The proposal has been assessed by other Council officers, including the Council's Development Engineer, Stormwater Services Engineer, Environmental Development Planner, Senior Environmental Health Officer and Parks Planner. The officers have raised no objection to the proposal, subject to conditions.

7.5 The proposal is recommended for approval.

8. Conclusion

8.1 The proposed Outbuilding (Storage Shed) at 30 Mcrobies Road, South Hobart satisfies the relevant provisions of the *Hobart Interim Planning Scheme 2015*, and as such is recommended for approval.

9. Recommendations

That: Pursuant to the *Hobart Interim Planning Scheme 2015*, the Council approve the application for Outbuilding (Storage Shed) at 30 Mcrobies Road, South Hobart for the reasons outlined in the officer's report and a permit containing the following conditions be issued:

GEN

The use and/or development must be substantially in accordance with the documents and drawings that comprise PLN-21-492 - 30 MCROBIES ROAD SOUTH HOBART TAS 7004 - Final Planning Documents, except where modified below.

Reason for condition

To clarify the scope of the permit.

ENG sw1

All stormwater from the proposed development (including but not limited to: roofed areas, ag drains, retaining wall ag drains and impervious surfaces such as driveways and paved areas) must be drained to the Council's stormwater infrastructure prior to first occupation or commencement of use (whichever occurs first).

Any private or private shared stormwater system passing through third-party land must have sufficient receiving capacity.

Advice: Under section 23 of the Urban Drainage Act 2013 it is an offence for a property owner to direct stormwater onto a neighbouring property.

Reason for condition

To ensure that stormwater from the site will be discharged to a suitable Council approved outlet.

ENG 1

Any damage to council infrastructure resulting from the implementation of this permit, must, at the discretion of the Council:

1. **Be met by the owner by way of reimbursement (cost of repair and reinstatement to be paid by the owner to the Council); or**
2. **Be repaired and reinstated by the owner to the satisfaction of the Council.**

A photographic record of the Council's infrastructure adjacent to the subject site must be provided to the Council prior to any commencement of works.

A photographic record of the Council's infrastructure (e.g. existing property service connection points, roads, buildings, stormwater, footpaths, driveway crossovers and nature strips, including if any, pre-existing damage) will be relied upon to establish the extent of damage caused to the Council's infrastructure during construction. In the event that the owner/developer fails to provide to the Council a photographic record of the Council's infrastructure, then any damage to the Council's infrastructure found on completion of works will be deemed to be the responsibility of the owner.

Reason for condition

To ensure that any of the Council's infrastructure and/or site-related service connections affected by the proposal will be altered and/or reinstated at the owner's full cost.

ENV 1

Sediment and erosion control measures sufficient to prevent sediment from leaving the site must be installed prior to any disturbance of the site, and maintained until all areas of disturbance have been stabilized or re-vegetated.

Advice: For further guidance in preparing a Soil and Water Management Plan – in accordance with Fact sheet 3 Derwent Estuary Program click [here](#).

Reason for condition

To avoid the sedimentation of roads, drains, natural watercourses, Council land that could be caused by erosion and runoff from the development, and to comply with relevant State legislation.

ADVICE

The following advice is provided to you to assist in the implementation of the planning permit that has been issued subject to the conditions above. The advice is not exhaustive and you must inform yourself of any other legislation, by-laws, regulations,

codes or standards that will apply to your development under which you may need to obtain an approval. Visit the Council's [website](#) for further information.

Prior to any commencement of work on the site or commencement of use the following additional permits/approval may be required from the Hobart City Council.

BUILDING PERMIT

You may need building approval in accordance with the *Building Act 2016*. Click [here](#) for more information.

This is a Discretionary Planning Permit issued in accordance with section 57 of the *Land Use Planning and Approvals Act 1993*.

PLUMBING PERMIT

You may need plumbing approval in accordance with the *Building Act 2016*, *Building Regulations 2016* and the National Construction Code. Click [here](#) for more information.

STORM WATER

Please note that in addition to a building and/or plumbing permit, development must be in accordance with the Hobart City Council's Infrastructure By law. Click [here](#) for more information.

FEES AND CHARGES

Click [here](#) for information on the Council's fees and charges.

DIAL BEFORE YOU DIG

Click [here](#) for dial before you dig information.



(Mark O'Brien)

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.



(Karen Abey)

Manager Development Appraisal

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Date of Report: 14 January 2022

Attachment(s):

Attachment B - CPC Agenda Documents

Attachment C - Planning Referral Officer Report(s)

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

To: TIFRENO BUILDERS - Glen Owner name
 28 Mcrobies Rd Address
 South Hobart TAS Suburb/postcode 7004

Form **35**

Designer details:

Name: John L Towler Category: Structural Eng.
 Business name: Phone No: (07) 3808 8118
 Business address: PO Box 783
 Gympie QLD 4570 Fax No:
 Licence No: CC4011J Email address: engineering@shedtech.com.au

Details of the proposed work:

Owner/Applicant: TIFRENO BUILDERS - Glen Designer's project reference No. 310725.C01
 Address: 28 Mcrobies Rd Lot No:
 South Hobart TAS 7004
 Type of work: Building work ☒ Plumbing work ☐ (X all applicable)

Description of work:

Building Class: 10a
New Steel Framed Portal Frame Shed

(new building / alteration /
 addition / repair / removal /
 re-erection
 water / sewerage /
 stormwater /
 on-site wastewater
 management system /
 backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions): (X all applicable certificates)

Certificate Type:	Certificate	Responsible Practitioner
	<input checked="" type="checkbox"/> Building design	Architect or Building Designer
	<input checked="" type="checkbox"/> Structural design	Engineer or Civil Designer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer or Civil Designer
	<input type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Service Designer
	<input type="checkbox"/> Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	<input type="checkbox"/> Other (specify)	
Deemed-to-Satisfy: <input type="checkbox"/>	Performance Solution: <input type="checkbox"/>	(X the appropriate box)

Other details:

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing Numbers:	Prepared by:	Date:
Gable Shed		
SH2009-07	ShedTech	13/03/2018
SH2009-08	ShedTech	20/09/2012
STSD-01.2	ShedTech	10/02/2015
STSD-02	ShedTech	10/11/2017
STSD200-02	ShedTech	
STSD150-01	ShedTech	
Additional Documents (Job Reference # 310725): Wind Load Certificate (2 Pages), Compliance Statement, Building Elevations, Column and Mullion Locations, Bracing Locations, Purlin and Girts Locations, Fly Bracing Locations.		
Schedules:	Prepared by:	Date:
Specifications:	Prepared by:	Date:
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by:	Date:

Standards, codes or guidelines relied on in design process:

AS 1170.0 General Principals (2002)
 AS 1170.1 Permanent & Other Actions (2002)
 AS 1170.4 Earthquake Loads (2007)
 AS 4100 Steel Structures Code (1998)
 AS 4600 Cold Formed Section Code (2018)
 AS 2870 Residential Slabs and Footings (2011)
 AS 1170.2 Wind Load (2011)

Any other relevant documentation:

Error! Reference source not found.

Attribution as designer:

I am responsible for the design of that part of the work as described in this certificate.

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

Designer: Name: (print) Signed Date

Licence No:

Assessment of Certifiable Works: (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.

If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.

TasWater must then be contacted to determine if the proposed works are Certifiable Works.

I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- ☐ The works will not increase the demand for water supplied by TasWater
- ☐ The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- ☐ The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- ☐ The works will not damage or interfere with TasWater's works
- ☐ The works will not adversely affect TasWater's operations
- ☐ The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- ☐ I have checked the LISTMap to confirm the location of TasWater infrastructure
- ☐ If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

Certification:

I being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

Designer:

Name: (print)

Signed

Date

25/06/2021

**Steeline Hobart**

ABN: 75 009 543 506
 Address: 1 Whitestone Drive
 Austins Ferry TAS 7011
 Email: tassiesheds@steeline.com.au
 Web: www.steeline.com.au

Phone: (03) 6249 4988
 Fax: (03) 6249 3838

Wind

No: 310725
 Date: 24/06/2021

Portal Garage/Shed Specifications

Site Address: 28 Mrobie Rd, South Hobart, TAS 7004, Australia
Dimensions: 10.0 m Wide × 20.0 m Long with a 4.5 m average roof height (-58.6° Orientation)
NCC Compliance: This shed has been designed with restricted internal pressures, Cpi = +0.2 & -0.3. Roller door supply must comply with AS4505

Site Location

The following map, obtained from Google Maps Imagery (©2021 Google), shows the site location:

**Wind Load (AS/NZS 1170.2:2011)**

The following table summarizes the wind parameters for this site:

Parameter	N	NE	E	SE	S	SW	W	NW
Importance Level	2 (1:500 Wind)							
Wind Region	A3 ($V_f = 45$ m/s)							
Wind Directional Multiplier M_d	0.85	0.80	0.80	0.80	0.80	0.85	0.90	1.00
Terrain Category	2.29	2.06	2.50	2.26	2.35	2.00	2.00	2.03
Terrain/height Multiplier $M_{z,cat}$	0.89	0.91	0.87	0.89	0.88	0.91	0.91	0.91
Shielding Multiplier M_s	0.90	0.83	0.84	1.00	1.00	1.00	1.00	1.00
Topographic Multiplier M_t	1.00	1.16	1.03	1.13	1.13	1.15	1.15	1.00
Site Wind Speed $V_{sit,8}$	31.34	31.50	30.00	37.12	37.12	40.16	42.52	40.95
Ultimate Design Wind Speed V_{des}	42.52 m/s (1.08 kPa)							
Service Design Wind Speed V_s	33.03 m/s (0.65 kPa)							

Terrain Category Map

The following site map shows the site in relation to the terrain category boundary (©2021 Google):



Shielding Map

The following site map shows the site in relation to the shielding boundary (©2021 Google):





Shed Kit Compliance Statement



Order Number: 310725

I certify that the shed kit components listed below are structurally adequate for their purpose. This document takes precedence over selections from tables in the standard drawings.

Signed:

Date: 25 June 2021

Customer Details:

Customer Name: TIFRENO BUILDERS - Glen
Site Address: 28 Mcrobies Rd South Hobart TAS 7004

Building Specifications:

Length: 20.00m
Width: 10.00m
Height: 3.60m

Building Style: Portal Frame Shed
Roof Style: Gable / Skillion
Roof Pitch: 10 °

Roof Cladding: Corrugated 0.42 BMT
Roof Screws: 14 - 10 x 50 SDM Hex Seal
Wall Cladding: Steelclad 0.42 BMT
Wall Screws: 10 - 16 x 16 Hex

Roller-Doors: 1 x Series "AA" Windlocked Roller-Door (3000 x 3700)
P/A Doors: 1 x Personal Access Door (2040 x 820)
Windows: N / A
Wall Insulation: Foil Sisalation (60m) Type 456
Full Coverage: Safety Mesh (2mm)

End Portal Frame: C20024
Internal Portal Frame: C20024
Knee Braces: N / A
Apex Braces: N / A

Roof Purlin Type: TopHat 120mm 1.20 BMT
Max Purlin Spacing: 866mm

Wall Girt Type: TopHat 120mm 1.20 BMT
Max Girt Spacing: 1050mm

Bay Count: 5
Bay Sizes: 3.88m, 3.88m, 4.50m, 3.88m, 3.88m

NCC Compliance: This shed has been designed with restricted internal pressures coefficient, Cpi = +0.2 & - 0.3. Roller door supply must comply with AS4505.

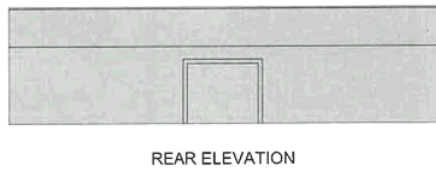
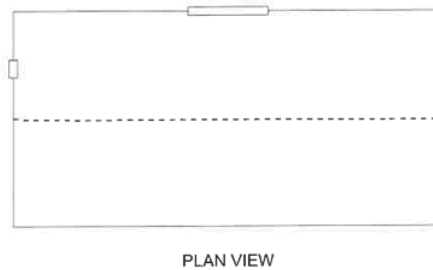
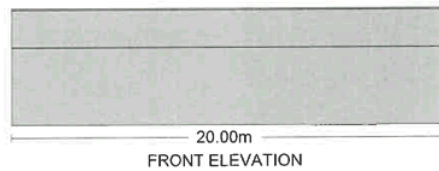
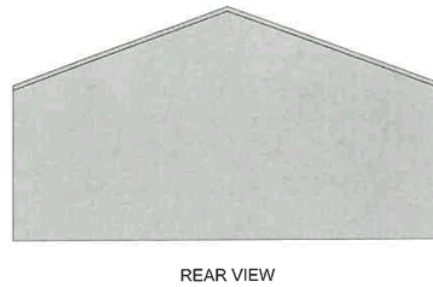
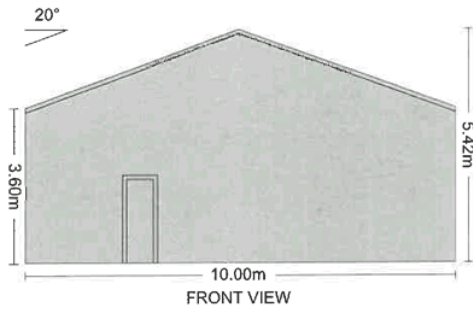
**Steeline Hobart**

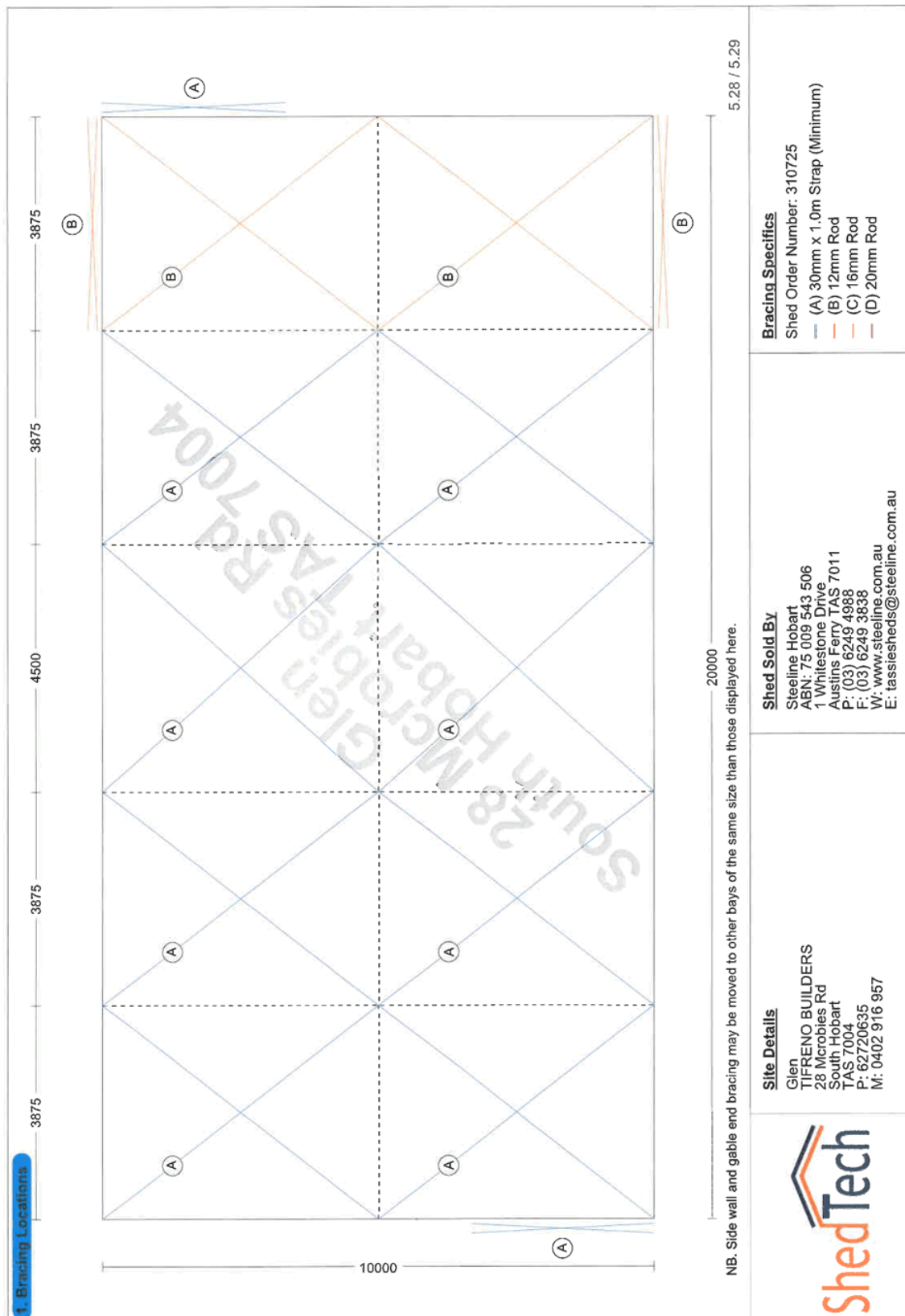
ABN: 75 009 543 506
Address: 1 Whitestone Drive
Austins Ferry TAS 7011
Email: tassiesheds@steeline.com.au
Web: www.steeline.com.au

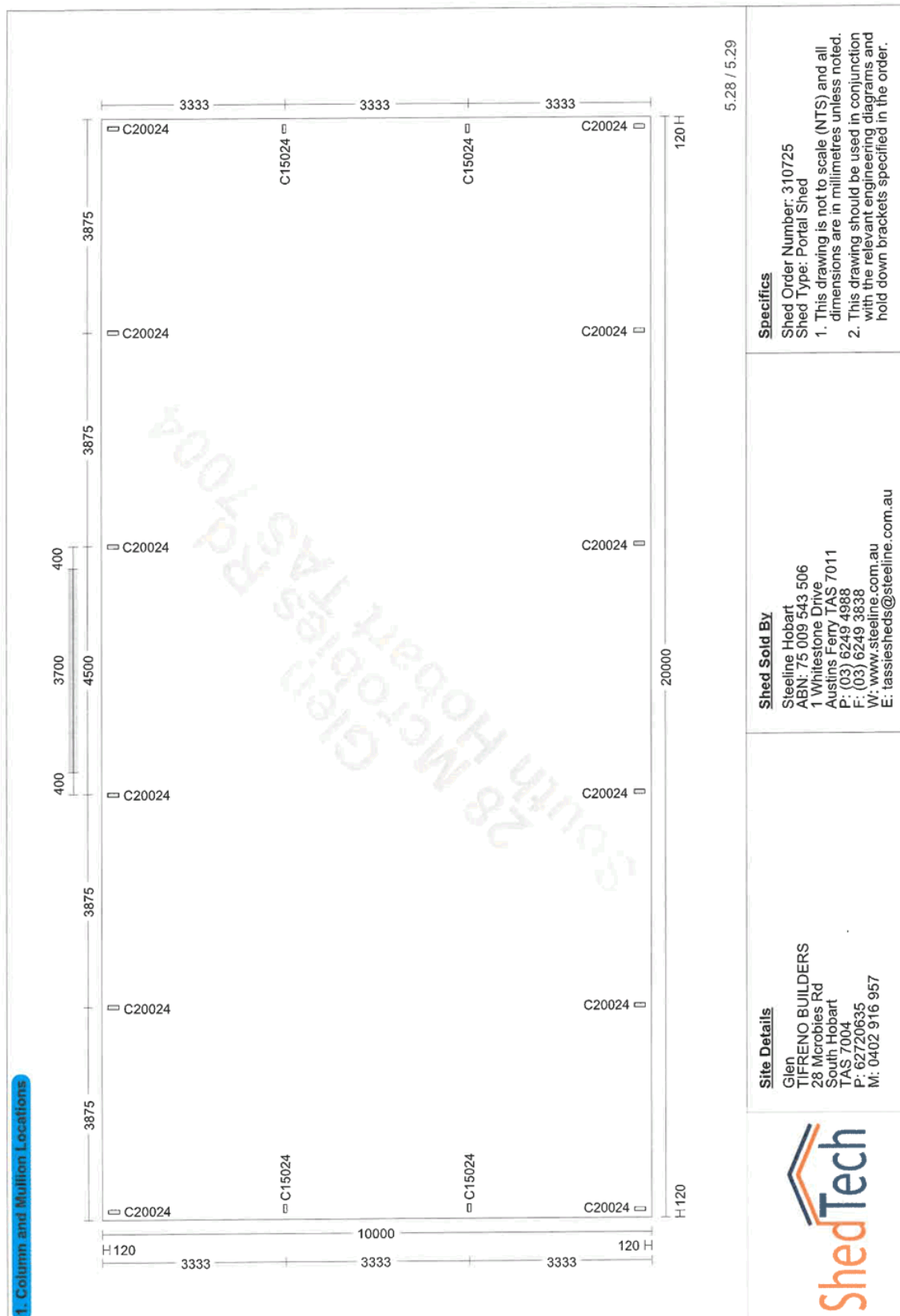
Phone: (03) 6249 4988
Fax: (03) 6249 3838

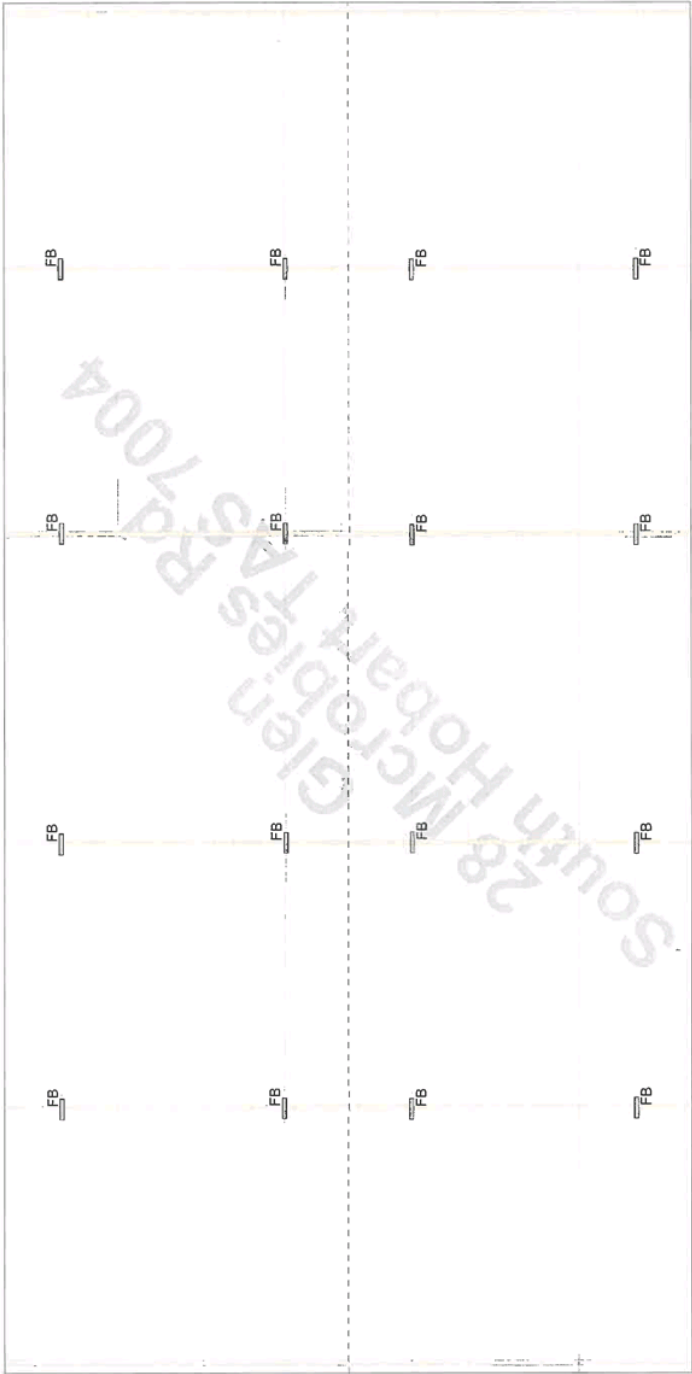

Order



No: **310725**
Date: 24/06/2021

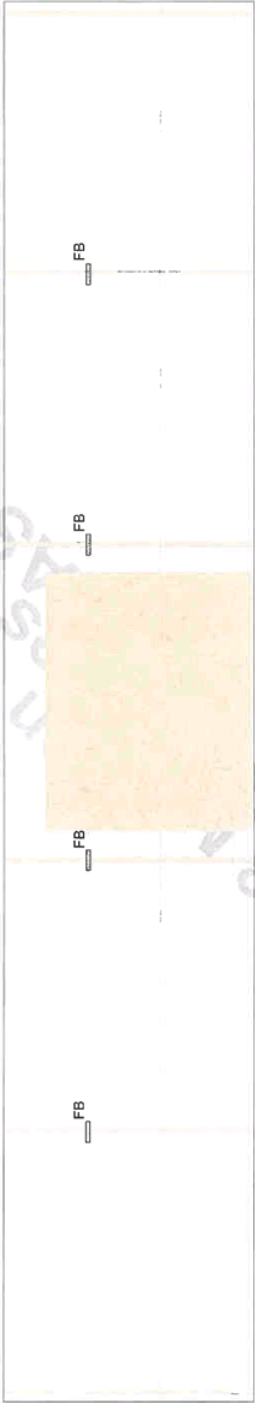



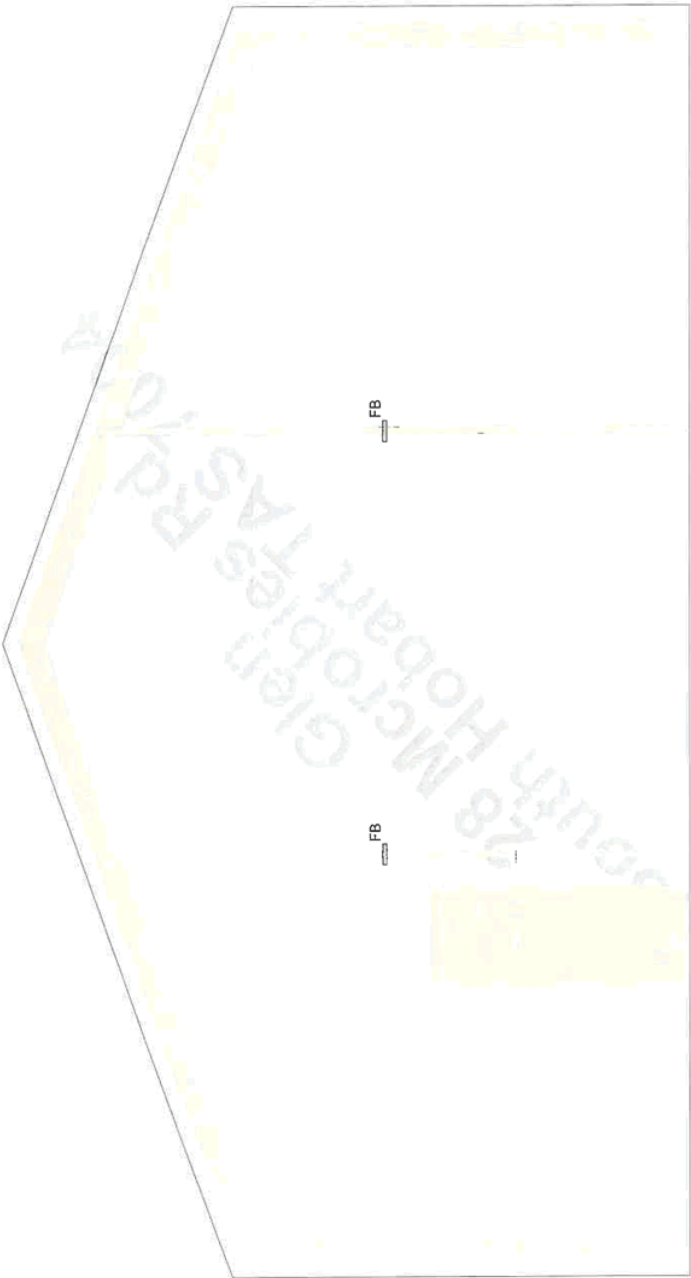



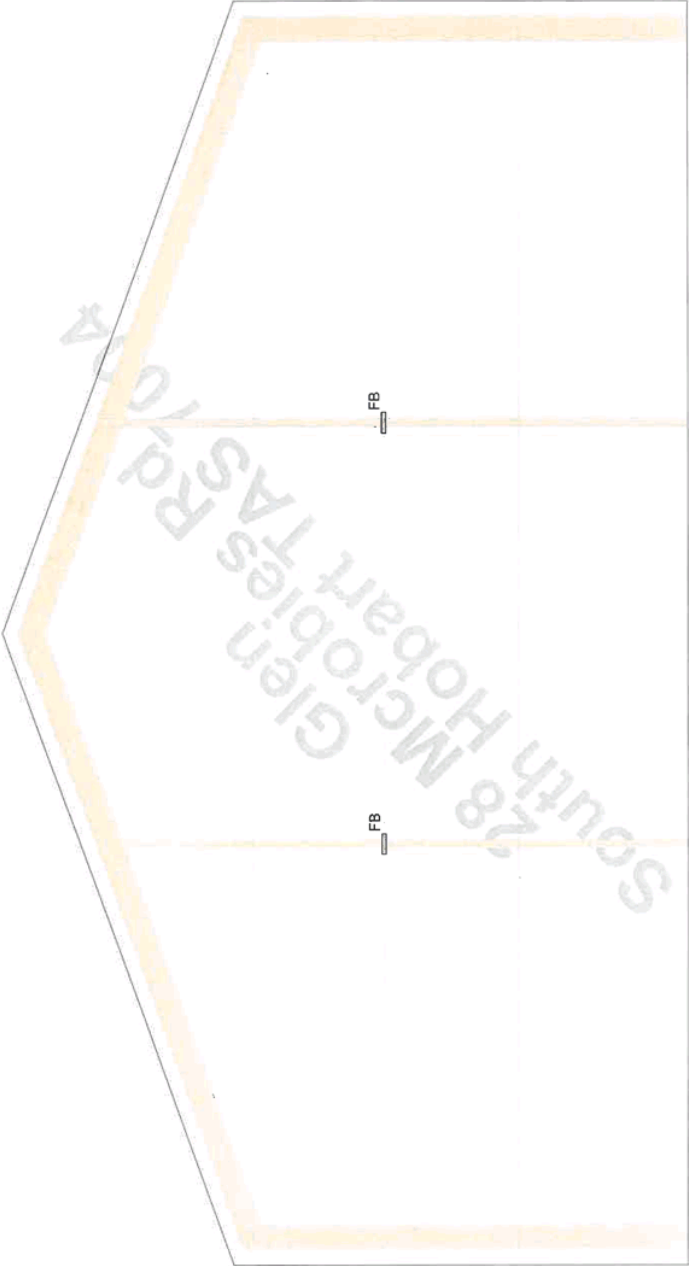



1. Fly Brace Locations		5.28 / 5.29	<div data-bbox="1209 1581 1315 1818"></div> <div data-bbox="1174 1357 1334 1545">Site Details Glen TIFRENO BUILDERS 28 Microbies Rd South Hobart TAS 7004 P: 62720635 M: 0402 916 957</div> <div data-bbox="1174 792 1350 1070">Shed Sold By Steelene Hobart ABN: 75 009 543 506 1 Whitestone Drive Austins Ferry TAS 7011 P: (03) 6249 4988 F: (03) 6249 3838 W: www.steelene.com.au E: tassiesheds@steelene.com.au</div> <div data-bbox="1174 362 1254 613">Fly Brace Specifics Shed Order Number: 310725 - Roof View</div>
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<div>1. Fly Brace Locations</div>	<div></div>	5.28 / 5.29	<div></div> <div><div><div><u>Site Details</u></div><div>Glen TIFRENO BUILDERS 28 Microbites Rd South Hobart TAS 7004 P: 62720635 M: 0402 916 957</div></div><div><div><u>Shed Sold By</u></div><div>Steelene Hobart ABN: 75 009 543 506 1 Whitestone Drive Austins Ferry TAS 7011 P: (03) 6249 4988 F: (03) 6249 3838 W: www.steelene.com.au E: tassisheds@steelene.com.au</div></div><div><div><u>Fly Brace Specifics</u></div><div>Shed Order Number: 310725 - Length Side View</div></div></div>
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		<div>Fly Brace Specifics Shed Order Number: 310725 - Width View</div>	

<div>1. Fly Brace Locations</div> 		5.28 / 5.29	<div></div>		<div>Site Details Glen TIFRENO BUILDERS 28 Microbics Rd South Hobart TAS 7004 P: 62720635 M: 0402 916 957</div>	<div>Shed Sold By Steelline Hobart ABN: 75 009 543 506 1 Whitestone Drive Austins Ferry TAS 7011 P: (03) 6249 4988 F: (03) 6249 3838 W: www.steelline.com.au E: tassisheds@steelline.com.au</div>	<div>Fly Brace Specifics Shed Order Number: 310725 - Reverse Width View</div>
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Site Details

Glen
TIFRENO BUILDERS
28 McRobies Rd
South Hobart
TAS 7004
P: 62720635
M: 0402 916 957

Shed Sold By

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 W: www.steelline.com.au
 E: tassiesheds@steelline.com.au

Purlin and Girt Locations

Shed Order Number: 310725

- Purlin & Girt Spacings
- (*) Place purlins as close to knee as possible
- (^) Place purlins as close to apex as possible

3. Purlin and Girt Layout

Label	Length
RP1	4.170m
RP2	4.505m
RP3	5.175m
RP4	4.505m
RP5	4.170m

RP1	RP2	RP3	RP4	RP5
RP1	RP2	RP3	RP4	RP5
RP1	RP2	RP3	RP4	RP5
RP1	RP2	RP3	RP4	RP5
RP1	RP2	RP3	RP4	RP5
RP1 (*)	RP2 (*)	RP3 (*)	RP4 (*)	RP5 (*)
RP1 (*)	RP2 (*)	RP3 (*)	RP4 (*)	RP5 (*)
RP1	RP2	RP3	RP4	RP5
RP1	RP2	RP3	RP4	RP5
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5.28 / 5.29



Site Details

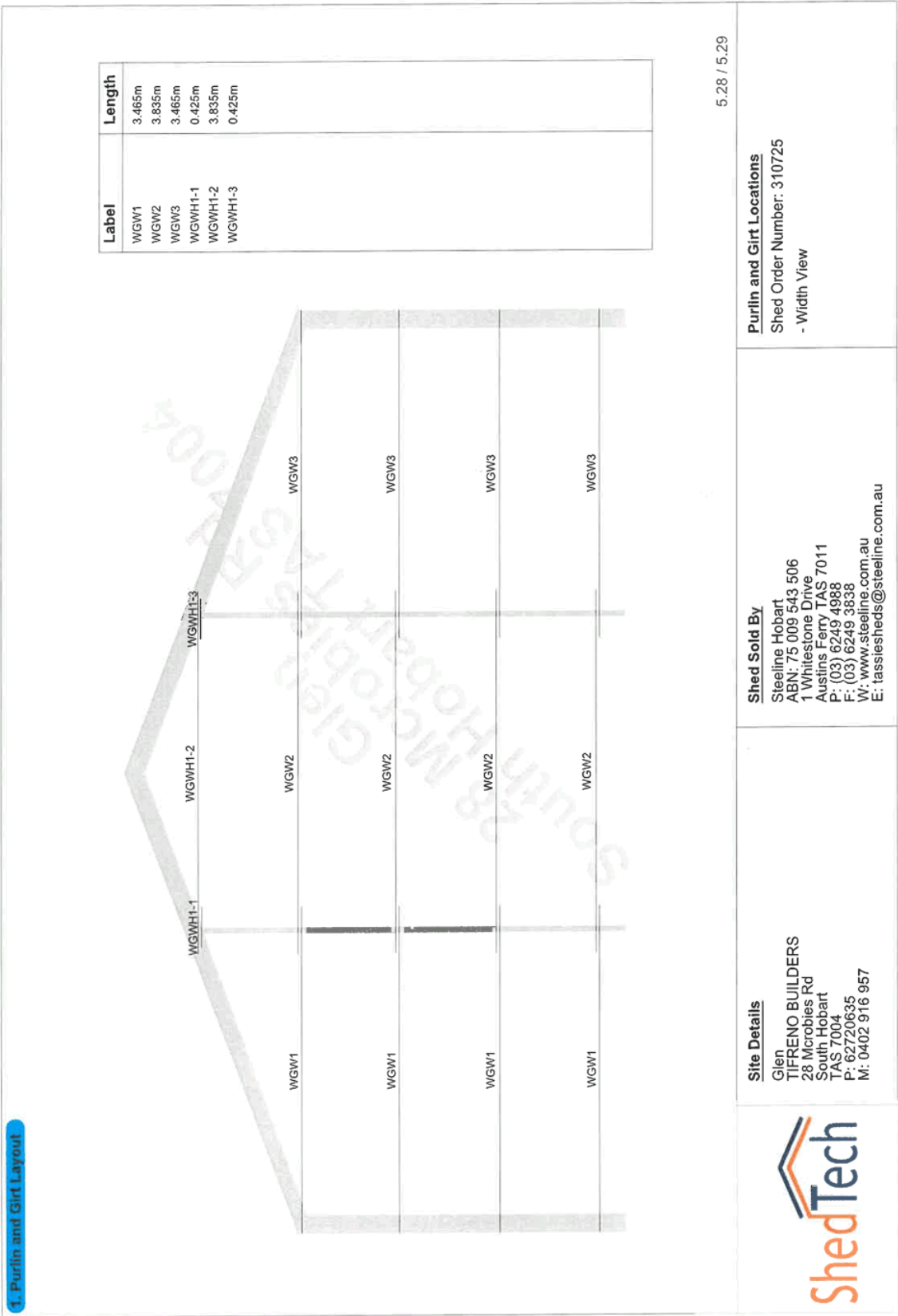
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P: 62720635
M: 0402 916 957

Shed Sold By

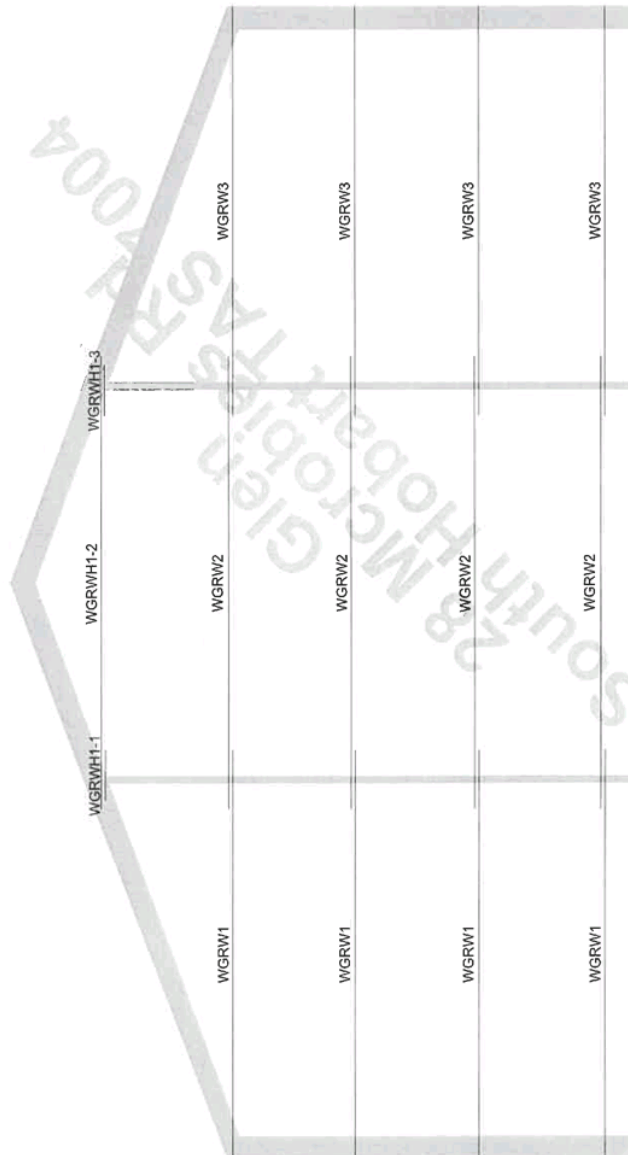
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W: www.steelene.com.au
E: tassiesheds@steelene.com.au

Purlin and Girt Locations

Shed Order Number: 310725
- Roof Purlins
- (*) Place purlins as close to knee as possible
- (*) Place purlins as close to apex as possible



Label	Length
WGRW1	3.465m
WGRW2	3.835m
WGRW3	3.465m
WGRWH1-1	0.425m
WGRWH1-2	3.835m
WGRWH1-3	0.425m



5.28 / 5.29

Purlin and Girt Locations

Shed Order Number: 310725
- Reverse Width View

Shed Sold By

Steelline Hobart
ABN: 75 009 543 506
1 Whitestone Drive
Austins Ferry TAS 7011
P: (03) 6249 4988
F: (03) 6249 3838
W: www.steelline.com.au
E: fassisheds@steelline.com.au

Site Details

**Glen
TIFRENO BUILDERS
28 McRobies Rd
South Hobart
TAS 7004
P: 62720635
M: 0402 916 957**



Label	Length
WGL1	4.170m
WGL2	4.505m
WGL3	5.175m
WGL4	4.505m
WGL5	4.170m

WGL1	WGL2	WGL3	WGL4	WGL5
WGL1	WGL2	WGL3	WGL4	WGL5
WGL1	WGL2	WGL3	WGL4	WGL5

5.28 / 5.29

Site Details

Glen
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P: 62720635
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Shed Sold By

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 P: (03) 6249 4988
 F: (03) 6249 3838
 W: www.steelline.com.au
 E: tassiesheds@steelline.com.au

Purlin and Girt Locations

Shed Order Number: 310725
- Length View

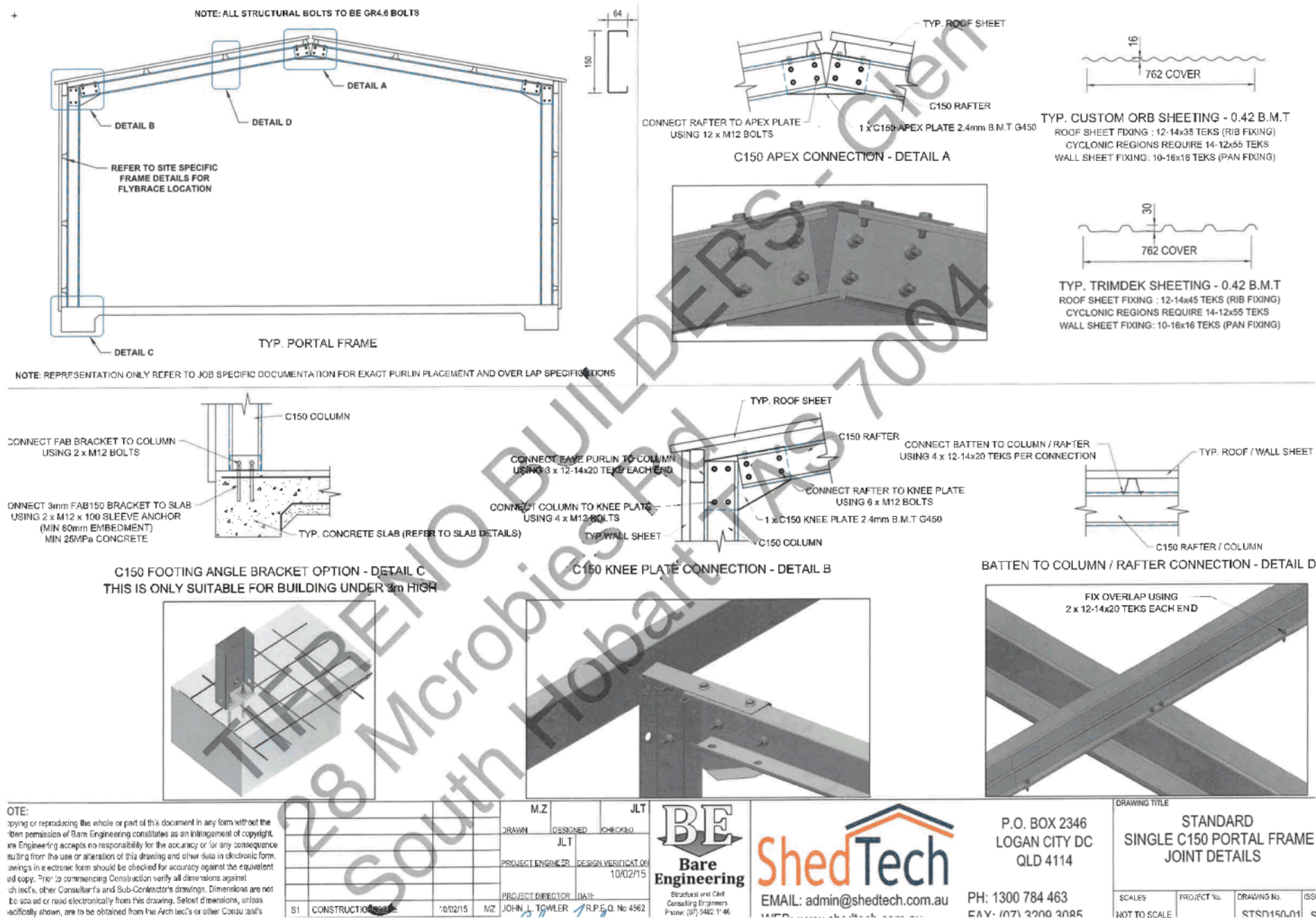
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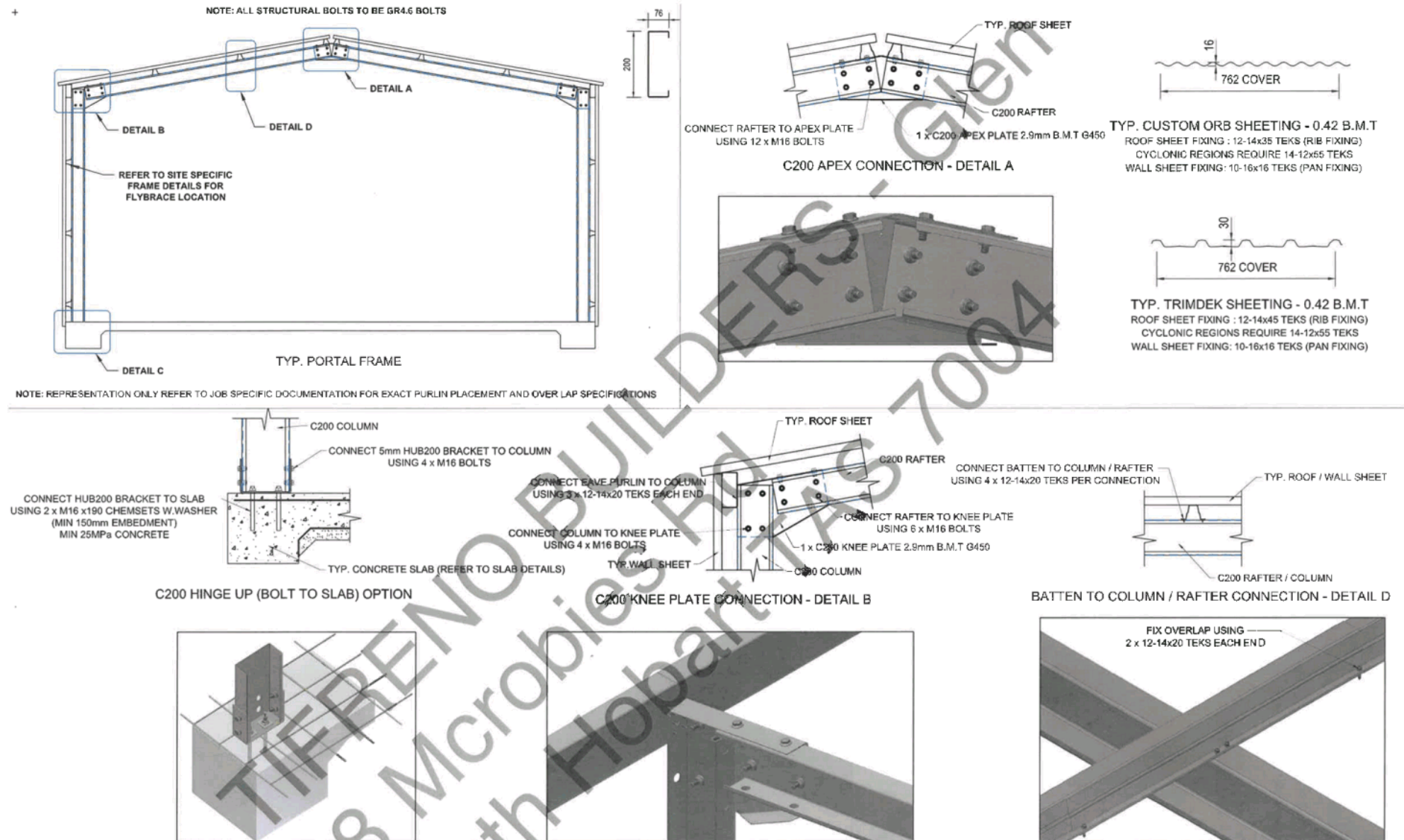
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WGRL2	4.420m
WGRL4	4.420m
WGRL5	4.170m



5.28 / 5.29

Purlin and Girt LocationsShed Order Number: 310725
- Reverse Length View**Shed Sold By**Steelene Hobart
ABN: 75 009 543 506
1 Whitestone Drive
Austins Ferry TAS 7011
P: (03) 6249 4988
F: (03) 6249 3838
W: www.steelene.com.au
E: tassiesheds@steelene.com.au**Site Details**Glen
TIFRENO BUILDERS
28 Microbes Rd
South Hobart
TAS 7004
P: 62720635
M: 0402 916 957





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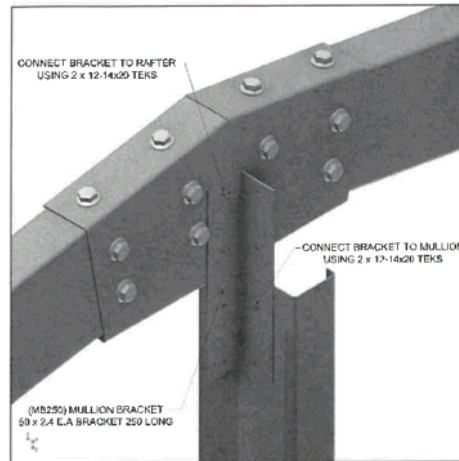
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			JLT	
PROJECT ENGINEER	DESIGN VERIFICATION			
	10/02/15			
PROJECT DIRECTOR	DATE			
JOHN L. TOWLER	P.E.Q. No 4562			
S1	CONSTRUCTION ISSUE	10/02/15	MZ	

BE
Bare Engineering
 Structural and Civil
 Consulting Engineers
 Phone: (07) 5452 1146

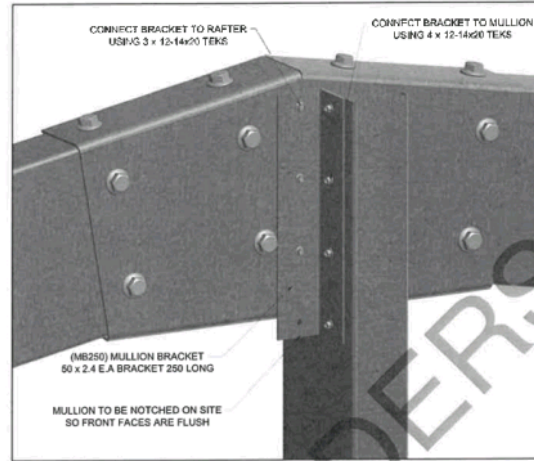
ShedTech
 P.O. BOX 2346
 LOGAN CITY DC
 QLD 4114
 EMAIL: admin@shedtech.com.au
 PH: 1300 784 463
 FAX: (07) 3200 2086

DRAWING TITLE
STANDARD
SINGLE C200 PORTAL FRAME
JOINT DETAILS

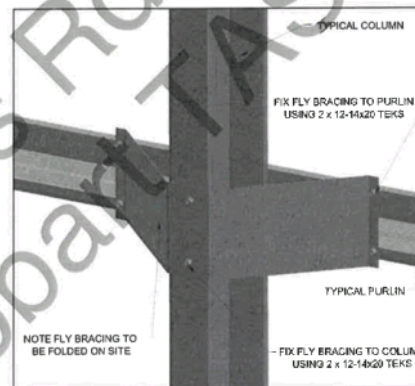
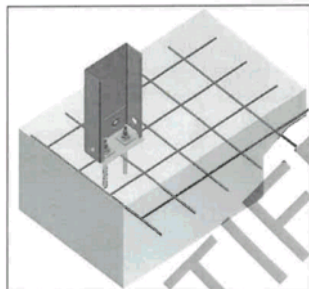
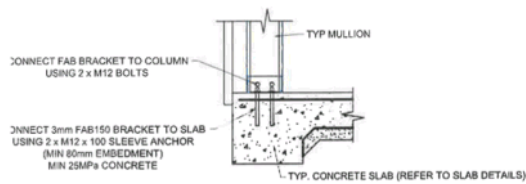
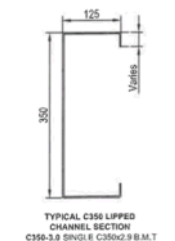
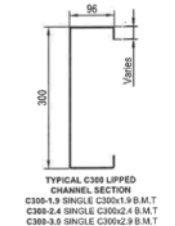
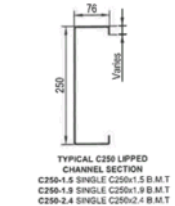
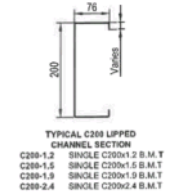
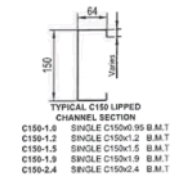
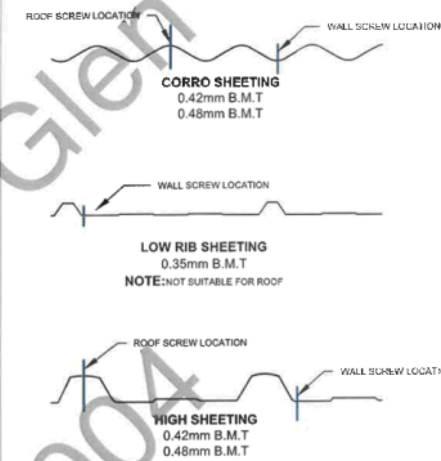
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ALTERNATIVE MULLION CONNECTION DETAIL



MULLION CONNECTION DETAIL

TYPICAL FLY BRACE DETAIL
BATTENS

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S2	DRAWING UPDATE	25/08/20	NM
S1	CONSTRUCTION ISSUE	10/02/15	MZ

M.Z	JLT
DRAWN	CHECKED
JLT	10/02/15
PROJECT ENGINEER	DATE
JOHN L. TOWLER	R.P.E.Q. No 4562



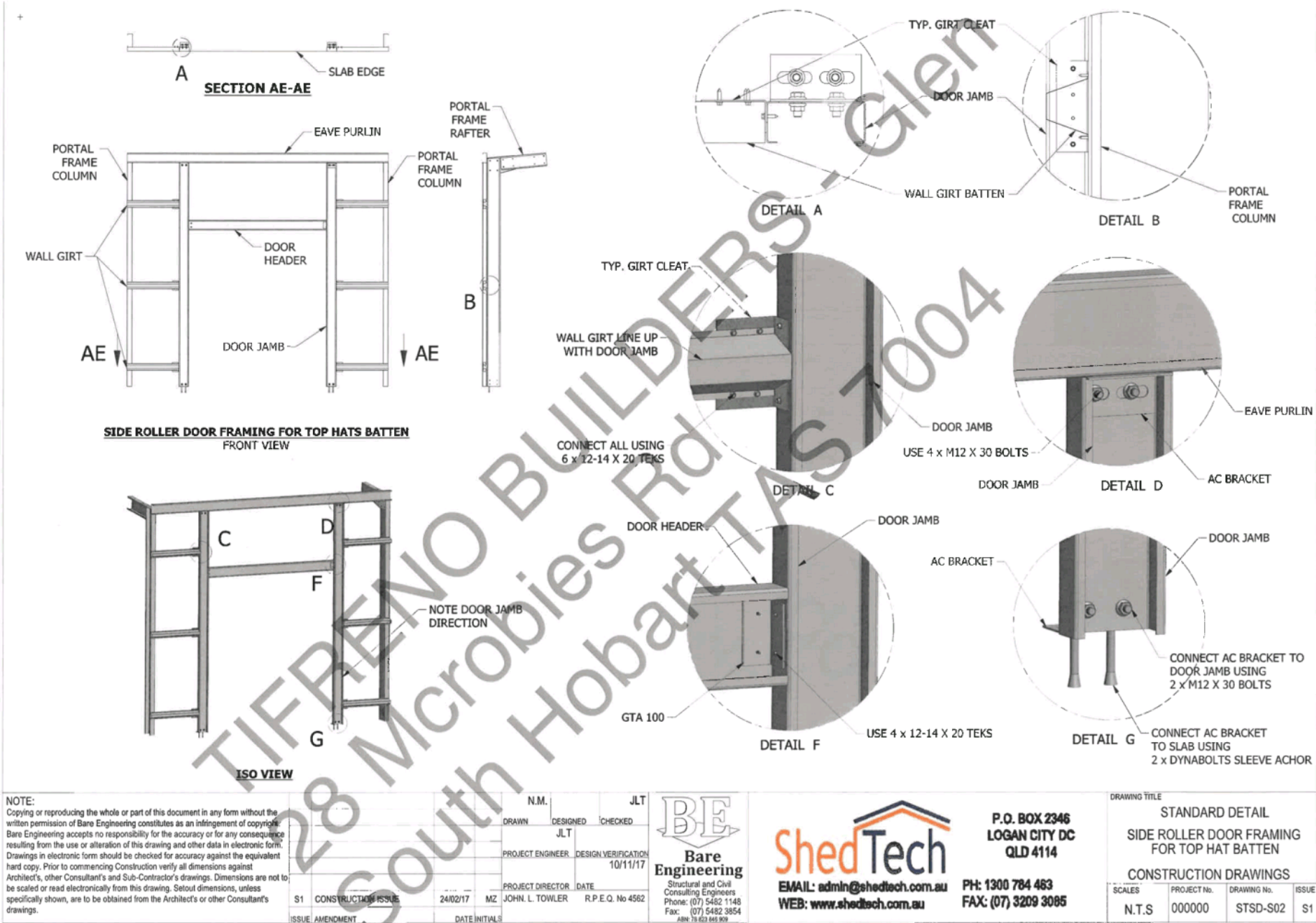
P.O. BOX 2346
LOGAN CITY DC
QLD 4114
PH: 1300 784 463
FAX: (07) 3209 3085

DRAWING TITLE

STD PORTAL FRAME
BATTENS

CONSTRUCTION DETAILS

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NOT TO SCALE	STJD-15	STSD-01.2	S



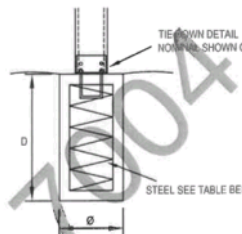
PIER ONLY DETAILS FOR PORTAL FRAME SHEDS

THE TABLE BELOW REPRESENTS THE REQUIREMENTS FOR ENCLOSED SHEDS OF BAY SIZES AND SPANS NOTED
 MAXIMUM HEIGHT OF SHEDS FOR THESE FOOTINGS SHALL NOT BE MORE THAN 6M AND NOT MORE THAN 66% OF SPAN.
 THE SPAN, BAY AND HEIGHTS NOTED IN THE TABLE REPRESENT MINIMUM REQUIREMENTS

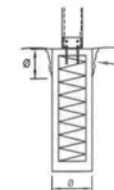
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	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth
32N	300 700	300 700	300 700	300 700	300 700	300 900	300 900	450 900	450 1000	450 1000	450 1000	450 1000
41N	300 700	300 700	300 700	300 700	300 700	300 900	300 900	450 900	450 1200	450 1200	450 1200	450 1200
50N	300 800	300 800	300 800	300 900	300 900	300 1000	300 1000	450 1000	450 1500	450 1500	450 1500	450 1500
60C	300 800	300 800	300 800	300 900	300 900	300 1000	300 1000	450 1000	450 1500	450 1500	450 1500	450 1500
61C	300 900	300 900	300 900	300 1000	300 1000	300 1200	300 1200	450 1200	450 1800	450 1800	450 1800	450 1800
3.5m BAYS	4m Shed Span	5m Shed Span	6m Shed Span	7.0m Shed Span	8.0m Shed Span	9m Shed Span	10m Shed Span	12m Shed Span	15m Shed Span	18m Shed Span	21m Shed Span	24m Shed Span
	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth
32N	300 700	300 700	300 700	300 900	300 900	300 900	300 900	450 900	450 1000	450 1000	450 1000	600 1200
41N	300 700	300 700	300 700	300 900	300 900	300 900	300 900	450 900	450 1200	450 1200	450 1200	600 1500
50N	300 800	300 800	300 800	300 900	300 900	300 1000	300 1000	450 1000	450 1500	450 1500	450 1500	600 1800
60C	300 800	300 800	300 800	300 900	300 900	300 1000	300 1000	450 1000	450 1500	450 1500	450 1500	600 1800
61C	300 900	300 900	300 900	300 1000	300 1000	300 1200	300 1200	450 1200	450 1800	450 1800	450 1800	600 1800
4.0m BAYS	4m Shed Span	5m Shed Span	6m Shed Span	7.0m Shed Span	8.0m Shed Span	9m Shed Span	10m Shed Span	12m Shed Span	15m Shed Span	18m Shed Span	21m Shed Span	24m Shed Span
	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth
32N	300 900	300 900	300 900	300 900	300 900	450 900	450 900	450 900	450 1000	450 1000	450 1200	600 1200
41N	300 900	300 900	300 900	300 900	300 900	450 900	450 900	450 1000	450 1200	450 1200	600 1200	600 1500
50N	300 900	300 900	300 900	300 1000	300 1000	450 1000	450 1100	450 1200	450 1500	450 1500	600 1500	600 1800
60C	300 900	300 900	300 900	300 1000	300 1000	450 1000	450 1100	450 1200	450 1500	450 1500	600 1500	600 1800
61C	300 900	300 900	300 1000	300 1000	300 1200	450 1200	450 1400	450 1500	450 1800	450 1800	600 1600	600 1800
4.5m BAYS	4m Shed Span	5m Shed Span	6m Shed Span	7.0m Shed Span	8.0m Shed Span	9m Shed Span	10m Shed Span	12m Shed Span	15m Shed Span	18m Shed Span	21m Shed Span	24m Shed Span
	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth
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41N	300 900	300 900	300 900	300 900	300 900	450 900	450 900	450 1000	450 1200	450 1200	600 1200	600 1500
50N	300 900	300 900	300 900	300 1000	300 1000	450 1000	450 1100	450 1200	450 1500	450 1500	600 1500	600 1800
60C	300 900	300 900	300 900	300 1000	300 1000	450 1000	450 1100	450 1200	450 1500	450 1500	600 1500	600 1800
61C	300 900	300 950	300 1000	300 1100	300 1200	450 1200	450 1400	450 1500	450 1800	450 1800	600 1600	600 1800
6m BAYS	4m Shed Span	5m Shed Span	6m Shed Span	7.0m Shed Span	8.0m Shed Span	9m Shed Span	10m Shed Span	12m Shed Span	15m Shed Span	18m Shed Span	21m Shed Span	24m Shed Span
	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth	Diam Depth
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41N	300 900	300 900	450 900	450 900	450 900	450 1000	450 1100	450 1200	600 1200	600 1200	600 1200	600 1500
50N	300 900	300 900	450 1000	450 1000	450 1000	450 1200	450 1400	450 1500	600 1500	600 1500	600 1500	600 1800
60C	300 900	300 900	450 1000	450 1000	450 1000	450 1200	450 1400	450 1500	600 1500	600 1500	600 1600	600 1800
61C	300 1000	300 1100	450 1200	450 1200	450 1300	450 1500	450 1600	450 1800	600 1800	600 2000	600 2000	600 2200



TYPE 1 PIERS



TYPE 2 PIERS



**DESIGN ALLOWANCES
SKIN FRICTION**

NOTES

- THESE PIER DETAILS ASSUME A MINIMUM SITE CLASSIFICATION OF SOIL CLASS 'M'
- FOR CLASS H & HD SITES, INCREASE DEPTH OF PIER BY ONE PIER DIAMETER. CLASS H PIERS SHALL BE MINIMUM DEPTH OF 1500mm
- MINIMUM BEARING CAPACITY OF PIER BASE SHALL BE 200KPa
- FOUNDING PIERS IN FILL SHALL NOT BE PERMITTED.
- CONCRETE SHALL BE A MINIMUM OF N2 WITH A DESIGN SLUMP OF 80mm ±20mm
- CONCRETE SHALL BE MECHANICALLY COMPACTED OR BY HAND RODDING
- PIERS SHALL BE LEFT PROUD OF THE GROUND SURFACE 50 - 150mm PERMITTED. TOP SHALL BE SLOPED TO ALLOW WATER TO DRAIN AWAY.
- STANDARD RULES FOR A CLASS 'H' SITE ACCORDING TO AS2870 REGARDING SURROUNDING FLORA PLACEMENT SHALL APPLY.
- NON-COHESIVE SOILS SUCH AS SANDS AND LOOSE SILTS SHALL BE TREATED AS 'PROBLEM SITES' AND SHALL NOT BE COVERED BY THIS DRAWING.
- CLASS 'E' AND 'E-D' SITES SHALL ALSO BE ALLOWED USING THESE TABLES WITH THE FOLLOWING PROVISIONS:
 - PIER DEPTH SHALL BE A MINIMUM OF 1800mm
 - TYPE 1 PIERS SHALL NOT BE PERMITTED
 - INCREASE TABLE DEPTHS BY ONE AND A HALF PIER DIAMETERS
- THE PORTAL SHED DESIGNS FOR THESE PIERS ASSUME THE FOLLOWING INTERNAL PRESSURE COEFFICIENTS
 - NON-CYCLONIC - +0.2
 - CYCLONIC - +0.7
- MACHINERY SHEDS AND OTHER OPEN SIDED TYPE SHEDS SHALL USE THE PIER DETAILS FOR CYCLONIC CONDITIONS
- ROOF ONLY BUILDINGS IN C1 CATEGORY SHALL USE N3 CASE FOR PIER SELECTION, IN C2 WIND CATEGORY, N4 CASE SHALL BE USED
- AWNINGS & END WALL COLUMNS SHALL USE THE FOOTINGS OF PORTALS CARRYING SIMILAR ROOF AREAS.
- THESE PIER DESIGNS ARE BASED ON A MINIMUM ALLOWABLE SOIL SHEAR STRESS OF 20KPa

REINF	Ø	MAX DEPTH
1 x Y12	300	900
2 x Y12	300	1200
2 x Y16	450	1200

Ø	MAX DEPTH	LIGS	STEEL
450	900	6mm @ 450	4 x Y12
450	1200	6mm @ 300	4 x Y12
450	2000	6mm @ 250	4 x Y12
600	1200	6mm @ 250	6 x Y12
600	1800	10mm @ 300	6 x Y16
600	2600	10mm @ 250	6 x Y16

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C4	TYPE CORRECTIONS	25.02.2014 JLT
C3	ENGINEER REVIEWED	20.09.2012 JME
P1	PRELIM COPY ENGINEER REVIEW	30.04.2012 JLT
C2	AMENDMENT TO TITLE BLOCK	29.12.2010 JME
C1	CONSTRUCTION ISSUE	20.08.2009 CMH
ISSUE/AMENDMENT	DATE/INITIALS	

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DRAWING TITLE

**PIER ONLY
DETAILS**

SCALES	PROJECT No.	DRAWING No.	ISSUE
NOT TO SCALE	12-J7758	SH2009-08	C4





Soil Contamination Assessment

**McRobies Gully Waste
Management Centre, 30 McRobies
Road, South Hobart, Tasmania**

**Sedgwick Claims Management
October 2021**

**Client No: S0172
Job No: 98633M**

Executive Summary

Prensa Pty Ltd (Prensa) was engaged by Sedgwick Claims Management (Sedgwick) to undertake a Soil Contamination Assessment (SCA) within a nominated area at McRobies Gully Waste Management Centre, 30 McRobies Road, South Hobart, Tasmania (the Site). The nominated area of the Site was denoted the 'Investigation Area' and has been illustrated in **Figures 1 and 2** attached.

Prensa understood that Sedgwick as the insurance provider has engaged a building contractor to undertake redevelopment works within the Investigation Area comprising the installation of a replacement storage shed. In order to facilitate the construction works within the Investigation Area, a planning permit (ref: *30 McRobies Road, South Hobart, Outbuilding (Storage Shed) Application No PLN-21-492*, dated 16 August 2021), was submitted to the Hobart City Council (Council). However, prior to the approval of the planning permit, Council required that an Environmental Site Assessment which complied with the relevant provisions of the Potentially Contaminated Land Code- E2.6.2 of the Hobart Interim Planning Scheme 2015, specifically, Condition PCL1 be met.

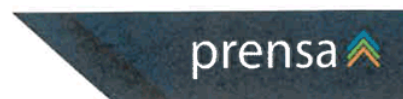
In light of the planning permit conditions, Sedgwick engaged Prensa to undertake a SCA to provide an indication of the contamination status within the Investigation Area with the following objectives:

- Provide an indication of the contamination status within the Investigation Area that may represent a potential ecological and/or health risk to construction workers during the construction phase of the works at the Site and for future users of the Site in light of the proposed storage shed development;
- Classify the soil within the Investigation Area in accordance with Information Bulletin No 105 to facilitate its disposal off-site (if required); and
- Provide recommendations for further assessment (where required).

The SCA included a desktop appraisal and the establishment of five (5) generally gridded soil boreholes within the Investigation Area.

The desktop review indicated that the Investigation Area formed part of a larger property which operated as the McRobies Gully Waste Management Centre, whilst the further surrounding area comprised National Park. Review of LISTmap documentation indicated that the Investigation Area and larger Site was not listed on the EPA Underground Petroleum Storage Systems, however, was listed as a Level 2 Activity on the EPA Regulated Premises Register. Given the Site has been subject to assessment, approval and undergoes ongoing monitoring and management, it was considered unlikely that contamination associated with the landfill operations would impact upon the Investigation Area. As such, it was considered unlikely that off-site sources of contamination would impact upon the Investigation Area.

The soil assessment identified generally a clayey gravel fill soil profile with minor anthropogenic material (bitumen, brick, glass and metal fragments) to an average depth of 0.6 m bgl. Odorous and/or stained soil were not observed within the fill or natural soil profiles during the soil sampling works nor were elevated photo-ionisation detector (PID) readings. This correlated with the soil analytical results which reported contaminant concentrations less than the adopted ecological and human health investigation/screening levels for a commercial/industrial land use. It was noted that elevated concentrations of benzo(a)pyrene (BaP) were reported in the fill profile soil which exceeded the ecological screening level. However, it was considered unlikely that the elevated BaP concentrations reported in discrete locations within the Investigation Area would pose a significant ecological risk to



the highly modified ecosystems present within the Investigation Area, which have likely acclimatised to the soil conditions. In addition, the elevated BaP concentrations were vertically delineated with the underlying natural soil samples reporting concentrations of BaP less than the adopted ecological screening level.

As such, based on the findings of the assessment, it was considered that the potential for significant soil contamination to exist within the Investigation Area which may represent a potential ecological and/or health risk to construction workers during the construction phase of the works at the Site and for future users of the Site was low. Furthermore, based on the findings of this SCA, it was considered that further assessment and/or remedial works are not warranted.

In light of these findings, Prensa considered that the compliance requirements, specifically Condition PCL1 of the Potentially Contaminated Land Code- E2.6.2 of the Hobart Interim Planning Scheme 2015 have been met.

In the event disposal of soil is required as an alternative to re-use, the fill profile soil within the Investigation Area is categorised as **Low Level Contaminated Soil - Level 2**, as specified in EPA Tasmania Information Bulletin No 105, 2018.

Statement of Limitations

This document has been prepared in response to specific instructions from Sedgwick Claims Management to whom the report has been addressed. The work has been undertaken with the usual care and thoroughness of the consulting profession. The work is based on generally accepted standards, practices of the time the work was undertaken. No other warranty, expressed or implied, is made as to the professional advice included in this report.

The report has been prepared for the use by Sedgwick Claims Management and the use of this report by other parties may lead to misinterpretation of the issues contained in this report. To avoid misuse of this report, Prensa advises that the report should only be relied upon by Sedgwick Claims Management and those parties expressly referred to in the introduction of the report. The report should not be separated or reproduced in part and Prensa should be retained to assist other professionals who may be affected by the issues addressed in this report to ensure the report is not misused in any way.

Prensa is not a professional quantity surveyor (QS) organisation. Any areas, volumes, tonnages or any other quantities noted in this report are indicative estimates only. The services of a professional QS organisation should be engaged if quantities are to be relied upon.

Sampling Risks

Prensa acknowledges that any scientifically designed sampling program cannot guarantee all sub-surface contamination will be detected. Sampling programs are designed based on known or suspected site conditions and the extent and nature of the sampling and analytical programs will be designed to achieve a level of confidence in the detection of known or suspected subsurface contamination. The sampling and analytical programs adopted will be those that maximises the probability of identifying contaminants. Sedgwick Claims Management must therefore accept a level of risk associated with the possible failure to detect certain sub-surface contamination where the sampling and analytical program misses such contamination. Prensa will detail the nature and extent of the sampling and analytical program used in the investigation in the investigation report provided.

Environmental site assessments identify actual subsurface conditions only at those points where samples are taken and when they are taken. Soil contamination can be expected to be non-homogeneous across the stratified soils where present on site, and the concentrations of contaminants may vary significantly within areas where contamination has occurred. In addition, the migration of contaminants through groundwater and soils may follow preferential pathways, such as areas of higher permeability, which may not be intersected by sampling events. Subsurface conditions including contaminant concentrations can also change over time. For this reason, the results should be regarded as representative only.

Sedgwick Claims Management recognises that sampling of subsurface conditions may result in some cross contamination. All care will be taken and the industry standards used to minimise the risk of such cross contamination occurring, however, Sedgwick Claims Management recognises this risk and waives any claims against Prensa and agrees to defend, indemnify and hold Prensa harmless from any claims or liability for injury or loss which may arise as a result of alleged cross contamination caused by sampling.

Reliance on Information Provided by Others

Prensa notes that where information has been provided by other parties in order for the works to be undertaken, Prensa cannot guarantee the accuracy or completeness of this information. Sedgwick Claims Management therefore waives any claim against the company and agrees to indemnify Prensa for any loss, claim or liability arising from inaccuracies or omissions in information provided to Prensa by third parties. No indications were found during our investigations that information contained in this report, as provided to Prensa, is false.

Recommendations for Further Study

The industry recognised methods used in undertaking the works may dictate a staged approach to specific investigations. The findings therefore of this report may represent preliminary findings in accordance with these industry recognised methodologies. In accordance with these methodologies, recommendations contained in this report may include a need for further investigation or analytical analysis. The decision to accept these recommendations and incur additional costs in doing so will be at the sole discretion of Sedgwick Claims Management and Prensa recognises that Sedgwick Claims Management will consider their specific needs and the business risks involved. Prensa does not accept any liability for losses incurred as a result of Sedgwick Claims Management not accepting the recommendations made within this report.

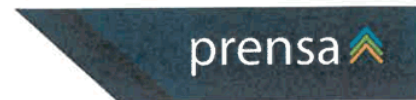


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Abbreviations

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Appendix A: Property Report

Appendix B: Hydrological Map

Appendix C: Adopted Soil Investigation Levels, Screening Levels and Criteria

Appendix D: EIL Derivation Spreadsheets

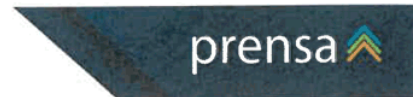
Appendix E: Soil Borehole Logs

Appendix F: ProUCL Statistical Calculation Table/Conversion Calculations Table

Appendix G: Equipment Calibration Certificate

Appendix H: Quality Assurance and Quality Control

Appendix I: NATA Accredited Laboratory Report & Chain of Custody Documentation



1 Introduction

Prensa Pty Ltd (Prensa) was engaged by Sedgwick Claims Management (Sedgwick) to undertake a Soil Contamination Assessment (SCA) within a nominated area at McRobies Gully Waste Management Centre, 30 McRobies Road, South Hobart, Tasmania (the Site). The nominated area of the Site was denoted the 'Investigation Area' and has been illustrated in **Figure 1** attached.

2 Background

Based on the information provided, it was understood that a storage building at the Site sustained fire damage in November 2020 and has subsequently undergone demolition. Prensa understood that Sedgwick as the insurance provider engaged a building contractor to undertake redevelopment works within the southern portion of the Site (hereby referred to as the Investigation Area). The redevelopment works comprised the installation of a replacement storage shed across an approximate footprint of 200 m². In order to facilitate the construction works within the Investigation Area, a planning permit (ref: 30 McRobies Road, South Hobart, Outbuilding (Storage Shed) Application No PLN-21-492, dated 16 August 2021), was submitted to the Hobart City Council (Council). However, prior to the approval of the planning permit, Council required that an Environmental Site Assessment which complied with the relevant provisions of the Potentially Contaminated Land Code- E2.6.2 of the Hobart Interim Planning Scheme 2015 be met. Specifically, Condition PCL1, which stipulated that:

A contamination Environmental Site Assessment report prepared by a suitably qualified and experienced person in accordance with the procedures and practices detailed in the National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPM) as amended 2013 must be provided. The report must conclude:

- *Whether any site contamination presents a risk to workers involved in redevelopment of the site, or future users of the site, as a result of proposed excavation of the site;*
- *Whether any site contamination presents an environmental risk from excavation conducted during redevelopment of the site; and*
- *Whether any specific remediation and/or protection measures are required to ensure proposed excavation does not adversely impact human health or the environment before excavation commences.*

As such, in light of the planning permit conditions, Sedgwick engaged Prensa to undertake a SCA within the Investigation Area to provide an indication of the contamination status within the Investigation Area.

3 Objectives

The objectives of the SCA were to:

- Provide an indication of the contamination status within the Investigation Area that may represent a potential ecological and/or health risk to construction workers during the construction phase of the works at the Site and for future users of the Site in light of the proposed storage shed development;
- Classify the soil within the Investigation Area in accordance with Information Bulletin No 105 to facilitate its disposal off-site (if required); and
- Provide recommendations for further assessment (where required).

4 Scope of Works

4.1 Key Undertakings

To complete the SCA, Prensa undertook the following:

- Desktop assessment, including review of the following information sources:
 - Planning property report which details the legal description of the Site;
 - Publicly available topographical, geological and hydrogeological maps;
 - EPA Underground Petroleum System;
 - EPA Regulated Premises; and
 - Australian Soil Resource Information System (ASRIS) for acid sulphate soil maps.
- Site inspection;
- Intrusive soil assessment, including:
 - Supervision of establishment of five (5) generally gridded boreholes to a maximum depth of 1.0 m below ground level (bgl) within the Investigation Area using hand sampling equipment;
 - Collection of soil samples throughout the soil profile (including quality control samples) at each borehole location to a maximum depth of 1.0 m bgl; and
 - Reinstatement of borehole locations using soil cuttings.
- Analysis of samples at a National Association of Testing Authorities (NATA), Australia accredited laboratory (including QA/QC checks);
- Comparison of results against the adopted ecological and human health investigation screening levels; and
- Preparation of this SCA.

4.2 Assessment Boundaries

The SCA was limited to an assessment within the Investigation Area, the location of which has been illustrated in yellow on **Figure 1** in the 'Figures' section of this report.

4.3 Regulatory Framework

The SCA was conducted with reference to and in general accordance with the methodologies outlined in the following:

- National Environment Protection Council (Tasmania) Act 1995 (NEPC 1995);
- Land Use Planning and Approvals Act 1993;
- State Policies and Projects Act 1993;
- National Environment Protection (*Assessment of Site Contamination*) Measure, 1999 (April 2013) (NEPM 2013);
- Australian Standard 4482.1, Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil, Part 1: Non-volatile and Semi-volatile Compounds, 2005;
- Australian Standard 4482.2, Guide to the Sampling and Investigation of Potentially Contaminated Soil, Part 2: Volatile Substances, 1999;
- CRC Care, Technical Report No. 10, Health Screening Levels for Petroleum Hydrocarbons in Soil and Groundwater, 2011;
- CRC Care, Technical Report No. 23, Petroleum Hydrocarbon Vapour Intrusion Assessment – Australian Guidance, 2013;

- Environmental Management and Pollution Control Act 1994 (EMPCA);
- State Policy on Water Quality Management, 1997;
- EPA Tasmania, Interim Default Guideline Values (DGVs) for Aquatic Ecosystems of Groundwater of Tasmania, EPA Tasmania, Hobart, Tasmania, June 2020; and
- Environmental Management and Pollution Control (Waste Management) Regulations 2020.

5 Desktop Review

5.1 Site Location and Description

The Investigation Area, which was located in the southern portion of the Site, comprised a rectangular area with an exposed soil surface. The Site containing the Investigation Area was located approximately 3 km southwest of the Hobart Central Business District. The location of the Site and Investigation Area has been illustrated in **Figure 1** provided in the 'Figures' section of this report.

A description of the Site has been provided in **Table 1** below.

Table 1: General Site Description	
Site Address	McRobies Gully Waste Management Centre, 30 McRobies Road, South Hobart, Tasmania
Total Area of Site	Site – approximately 77,000 m ² (7.7 hectares) Investigation Area – approximately 200 m ² (0.02 hectares)
Construction Year	McRobies Gully Waste Management Centre as a landfill began operating in 1975
Property ID	3273346
Title Owner	Hobart City Council
Local Council	Glenorchy City Council
Planning Zone	Environmental Management and Utilities under the Hobart Interim Planning Scheme of 2015.
Current Site Use	The Investigation Area forms part of a larger property which operates as the McRobies Gully Waste Management Centre (The Tip)
Proposed Works	Installation of a storage shed

Planning Property Reports sourced from the Department of Transport, Planning and Local Infrastructure (DTPLI) for the Site are provided in **Appendix A**.

5.2 Environmental Setting & Limited Desktop Review

Prensa undertook the following review to assist with establishing the environmental setting of the Site which includes the Investigation Area. A summary of the information reviewed has been provided in **Table 2** on the following page.

Table 2: Environmental Setting & Limited Desktop Review

Item	Description
Surroundings Uses	<ul style="list-style-type: none"> • North: The Investigation Area was bound to the north by domestic waste sorting bays associated with the Resource Work Cooperative (not-for-profit, self-funding co-op) waste area of the McRobies Gully Waste Management Centre. A vacant grassed area was observed to the north of the waste sorting bays (approximately 50 m north of the Investigation Area) and was observed to extend approximately 130 m north of the Investigation Area, at its nearest point. The area to the north and north east of the vacant grassed areas comprised the landfilling areas of the McRobies Gully Waste Management Centre. The landfilling areas were noted to extend approximately 400 m to the immediate north and approximately 980 m north west of the Investigation Area. A section of McRobies Road was observed approximately 125 m north east of the Investigation Area (at its closest point). North of McRobies Road, a portion of the Wellington Park National Forest was observed and extended approximately 2 km until residential properties were observed. The Wellington Park National Forest was also observed 1 km to the north west of the Investigation Area. • East: The Investigation Area was bound to the east by areas utilised for the Resource Work Cooperative waste area of the McRobies Gully Waste Management Centre. This areas was observed to comprise access roadways with associated carparks, waste sorting bays and warehouse structures and extended towards a section of McRobies Road, approximately 110 m east of the Investigation Area, at its closest point. East of McRobies Road, a portion of the Wellington Park National Forest was observed and extended approximately 1 km east of the Investigation Area until residential properties were observed. • South: The Investigation Area was bound to the south to south east by a storage warehouse and access roadways associated with the Resource Work Cooperative waste area of the McRobies Gully Waste Management Centre. A drainage waterway was observed to the immediate south to south west of the Investigation Area. The Wellington Park National Forest was observed approximately 20 m south of the Investigation Area (at its closest point) and extended approximately 430 m south of the Investigation Area until the Hobart Rivulet and Cascade brewery was observed. • West: A segment of the drainage waterway was observed to the immediate west of the Investigation Area. West of the drainage waterway, the Wellington Park National Forest was observed and was the predominant feature.
Topography	<p>Prensa reviewed the online resource LISTmap '1:25000 Topographic Index' which indicated that the Investigation Area and Site were positioned within a valley with the on-site surface elevation ranging from 130 m AHD in the southern portion of the Site to 160 m AHD in the northern portion of the Site. The off-site surface elevation ranged from 150 m AHD for the areas surrounding the southern portion of the Site to 190 m AHD for the areas surrounding the northern portion of the Site</p> <p>The surrounding area generally slopes in a general north west to south easterly direction.</p>

Table 2: Environmental Setting & Limited Desktop Review

Item	Description
Geology	<p>Prensa reviewed the Reconnaissance Soil Map Series of Tasmania, Hobart Map (1:100,000), published by the Department of Primary Industries, Water & Environment, Tasmania 2000. The map identified that the Site was located across two (2) geological units.</p> <p>The area comprising the Investigation Area was within an area likely characterised by Permian Aged Podzolic soils on mudstone which comprises poor to imperfectly drained grey brown soils. This was consistent with a review of the online resource LISTmap.</p> <p>This generally correlated with field observations which identified the natural soil profile to comprise grey silty clays.</p> <p>The area remainder of the Site, specifically to the east and north of the Investigation Area was within an area likely characterised by Triassic Aged Podzol and Podzolic soils on sandstone.</p>
Surface Water Receptors	<p>No surface water bodies were present at the Site. The closest surface water receptor was Hobart Rivulet, approximately 450 m south east of the Investigation Area at its closest point. It was noted that the following unnamed water bodies were also identified:</p> <ul style="list-style-type: none"> • A drainage waterway, located to the immediate west of the Investigation Area; and • The Hobart Rivulet was, located approximately 430 m south of the Investigation Area).
Groundwater Quality	<p>A search of the Groundwater Information Access Portal on-line database provided through the DPIPWE's Groundwater Information Management System (GWIMS) (accessed on 11 October 2021) indicated the following:</p> <ul style="list-style-type: none"> • Expected depth to groundwater – range 40 – 50 m bgl based on the review of the installation depth of regional groundwater monitoring wells; and • Minimal drilling has been undertaken within these geologies, however Groundwater quality is likely to be similar to that in similar rocks to the north where salinity is mostly low, allowing for a wide range of uses. <p>These findings were consistent with a review of the Groundwater Prospectively Map for Southeast Tasmania (1:250,000) published by Mineral Resources Tasmania (MRT), 2006, which is provided as Appendix B.</p>

Table 2: Environmental Setting & Limited Desktop Review

Item	Description
Groundwater Bore Database	<p>A search of the Groundwater Information Access Portal on-line database provided through the DPIPW's Groundwater Information Management System (GWIMS) (accessed on 11 October 2021) for groundwater bore usage within a 2 km radius of Site indicated that there were two (2) registered bores.</p> <p>Review of the two (2) registered bores identified the following pertinent information:</p> <ul style="list-style-type: none"> One (1) abandoned bore located in South Hobart (Bore Id 17284), approximately 800 m south of the Site. The groundwater bore was drilled to approximately 60 m below ground level and groundwater was encountered during drilling at a depth of 48 m. Additional information including standing water level, lithology and sampling events were not provided; and One (1) abandoned bore located in Lenah Valley (Bore Id 40210), approximately 1.94 km north west of the Site. The groundwater bore was drilled to approximately 54 m below ground level. The depth to groundwater encountered during drilling was not noted. Additional information including standing water level, lithology and sampling events were not provided. <p>A search of the borehole points of Tasmania (Mineral Resources Tasmania) using the online resource LISTmap indicated that twelve (12) groundwater bores were installed at the Site. Review of the groundwater bores identified the following pertinent information:</p> <ul style="list-style-type: none"> The bores were installed with a combination of wither percussion and/or solid auger drilling methods; The groundwater bores were established to depths ranging 11.5-30 m bgl; and Additional information including standing water level, lithology and sampling events were not provided.
Groundwater Prospectively	<p>A search of the online resource LISTmap for potential groundwater based on the properties of broad rock groups was undertaken on 6th October 2021. The online resource indicated that the Site was located within a moderate-high yield fractured rock aquifer characterised by permo-triassic sediments, carbonate sequences (limestone, dolomite).</p>
EPA Underground Petroleum Storage Systems	<p>A search of the online resource LISTmap for underground storage systems was undertaken on 6th October 2021. The online resource indicated that the Site was not listed on nor in the immediate vicinity of a property registered to comprise underground petroleum storage systems.</p> <p>The closest properties registered to comprise underground petroleum storage systems were:</p> <ul style="list-style-type: none"> An abandoned system at the de-listed property located adjacent 38 Apsley St, South Hobart, located approximately 700 m south east of the Site; and A permanently decommissioned system at 16 Degraes St, South Hobart, located approximately 730 m south east of the Site.

Table 2: Environmental Setting & Limited Desktop Review

Item	Description
EPA Regulated Premises	<p>A search of the online resource LISTmap for EPA Regulated Premises was undertaken on 6th October 2021.</p> <p>The LISTmap search identifies location of Level 2 regulated premises as well as contaminated properties which are currently regulated by EPA Tasmania.</p> <p>The online resource indicated that the Site (which includes the Investigation Area) which operates as a landfill was listed as a premises controlled and regulated by EPA Tasmania. Review of Permit Conditions Environmental (PCE) document (Document Number 9322, Activity 3B2 (Other (non-inert) Waste Depots) identified that:</p> <ul style="list-style-type: none"> • The Site which operates as the McRobies Gully Waste Depot was listed with a regulatory limit of 85,000 tonnes of receivable waste per year; • The landfill which commenced operations in 1975 is highly regulated with ongoing surface, groundwater, leachate and final capping monitoring undertaken; • The groundwater monitoring is undertaken at three (3) off-site groundwater wells, however installation details and additional information was not available for review; • The landfill is licensed to accept Low Level Contaminated Soil - Level 2; and • An environmental review report is made publically available each year and to date no infringement notices has been issued from EPA Tasmania in relation to its operations of the landfill.
Potential for Acid Sulphate Soil	<p>A search of the Australian Soil Resource Information System (ASRIS) which includes a map of National Acid Sulfate Soil Reference Sites sourced from the Commonwealth Scientific and Industrial Research Organisation (CSIRO) as well as State and Territory partners was conducted on 6th October 2021.</p> <p>The search indicated that there was extremely low probability of acid sulfate soil occurrence within the area.</p> <p>In addition, review of LISTmap did not indicate the Site to be within an area characterised by acid sulfate soil.</p>

6 Site Inspection

Prensa undertook an inspection of the Investigation Area and immediate surrounds during the soil sampling works undertaken on 21st September 2021.

The Investigation Area was located in the southern portion of the Site as illustrated in **Figures 1 and 2** attached to this SCA.

During the inspection, the following pertinent observations of the Investigation Area and greater Site area were noted:

- The Investigation Area at the time of the site inspection comprised an exposed soil area and formed part of the greater surrounding area which was utilised for the Resource Work Cooperative of the McRobies Gully Waste Management Centre;
- Minor anthropogenic/building debris in the form of bitumen, brick, glass and metal fragments were observed on the exposed soil surface and within the fill profile soil. Spills and/or staining was not observed on the exposed soil surface nor within the soil profile;

- The topography of the Investigation Area and the immediate surrounding area was relatively flat, with a slight downward slope toward the south;
- The area in the immediate vicinity of the Investigation Area was observed to comprise:
 - A storage warehouse to the immediate south of the Investigation Area;
 - An access roadway with a roof covering for domestic waste drop-off was located to the immediate east of the Investigation Area. East of the domestic waste drop-off a warehouse building and associated office area which operated as the 'Tip Shop' was located;
 - Additional domestic waste sorting bays and associated car parking bays were located to the north east and south east of the Investigation Area;
 - An access roadway (McRobies Road) was observed to the north east of the Site which led to the commercial landfill area of the McRobies Gully Waste Management Centre; and
- Visible staining/spills and/or evidence of significant contaminating features in the immediate vicinity of the Investigation Area were not identified or observed during Prensa's inspection. A detailed inspection of the remainder of the property was not undertaken as it was outside the scope of this assessment.

7 Adopted Assessment Criteria

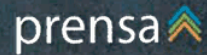
This assessment has been undertaken with regard to the guidelines issued by the EPA pursuant to the Act, EMPCA, NEPM, and other published guidelines and standards.

To assess the significance of contaminant concentrations in soil, reference was primarily made to NEPM 2013, specifically 'Schedule B1 Guideline on Investigation Levels for Soil and Groundwater' (Schedule B1) for assessment criteria, where available. Schedule B1 provides a framework for the use of investigation and screening levels based on human health and ecological risks. In the absence of relative criteria in NEPM 2013, reference was made to other nationally or state endorsed guidelines.

Based on the project objectives, criteria for a commercial/industrial land use for the protection of construction workers during the construction phase of the works and for future users in light of the proposed storage shed development was adopted.

The adopted guidelines for this SCA has been provided in **Table 3** below. Details pertaining to the derivation of these adopted guidelines have been provided in **Appendix C** and **Appendix D**.

Table 3: Hierarchy of Adopted Soil Guidelines	
Environmental Value of Land	Adopted Guidelines
Ecological	1. NEPC, NEPM 2013, Ecological Investigation Levels (EILs) and Ecological Screening Levels (ESLs).
Human Health	1. NEPC, NEPM 2013, Health Investigation Levels (HILs) and Health Screening Levels (HSLs). 2. CRC CARE (2011) <i>Technical Report No. 10</i> , Health Screening Levels for direct contact. 3. NEPC, NEPM 2013, Management Limits for petroleum hydrocarbon compounds.
Buildings & Structures	1. NEPC, NEPM 2013, Management Limits for petroleum hydrocarbon compounds.



8 Soil Assessment

8.1 Sampling Strategy

Prensa collected seventeen (17) soil samples (including QC samples) from five (5) generally gridded soil sampling locations (BH1-BH5) established within the Investigation Area using hand sampling equipment (hand auger). The soil sampling plan of the Site has been illustrated in **Figure 2** attached. Soil samples were generally collected at near surface (0.1 m), 0.5 m and 1.0 m depths or until natural soil was adequately penetrated.

The sampling density was in accordance with the minimum number recommended in AS 4482.1 for a site of this size (200 m²) and provided a hot spot detection diameter of 7.46 m with 95% confidence. This sampling strategy allowed site-wide investigation of sites potentially contaminated by non-volatile and semi-volatile compounds.

Borehole logs have been provided in **Appendix E** of this report.

8.2 Soil Screening

Soil samples were screened in the field using a photo-ionisation detector (PID) to provide an indication of the potential of volatile contamination within the samples. The PID was calibrated at the start of the day with isobutylene of a known concentration (95 ppm). The PID calibration certificate has been provided as **Appendix G**.

8.3 Soil Sample Collection

Disposable nitrile gloves were worn during sample collection, which were replaced after the collection of each sample and between sampling locations to avoid cross-contamination. Collected soil samples were placed in 250 mL glass jars with Teflon-lined lids that were prepared and supplied by a NATA accredited laboratory. Collected samples were stored in chilled ice chests and transported to the laboratory within specified holding times, along with chain of custody documentation. Upon completion of soil sampling, sampling locations were reinstated with soil cuttings.

8.4 Soil Analytical Schedule

The analytical schedule adopted for the soil assessment works has been summarised in **Table 4** below.

Table 4: Soil Analytical Schedule				
Location ID	Depth	Samples Collected (m)	Samples Analysed (m)	Analyte
BH1	Fill	0.1	0.1	Metals ⁽¹⁾ , PAH ⁽²⁾ , TRH ⁽³⁾ , BTEXN ⁽⁴⁾
		0.5	0.5	
	Natural	1.0	-	-
BH2	Fill	0.1	0.1	Metals, PAH, TRH, BTEXN
		0.5	0.5	
	Natural	1.0	1.0	Metals, PAH, TRH, BTEXN, CEC ⁽⁵⁾ , % Fe, pH(CaCl ₂), TOC, % Clay Content, sulphate, chloride
BH3	Fill	0.1	0.1	Metals, PAH, TRH, BTEXN
		0.5	0.5	
	Natural	1.0	-	-
BH4	Fill	0.1	0.1	Metals, PAH, TRH, BTEXN
		0.5	0.5	
	Natural	1.0	-	-
BH5	Fill	0.1	0.1	EPAV 1828.2 Screen ⁽⁶⁾ , OPP ⁽⁷⁾ , Acid Herbicides, Be, B, Co, Mn, CEC, % Fe, pH(CaCl ₂), TOC, % Clay Content, sulphate, chloride
		0.5	0.5	
	Natural	1.0	-	-

(1) Metals M17 includes: As, Ba, Be, B, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Hg, Se, Ag, Sn, Zn.

(2) PAH: Polycyclic Aromatic Hydrocarbons

(3) TRH: Total Recoverable Hydrocarbons

(4) BTEXN: Benzene, Toluene, Ethylbenzene, Xylene, Naphthalene

(5) CEC: Cation exchange capacity

(6) The EPAV 1828.2 Soil Screen suite of contaminants includes the following:

- Total Recoverable Hydrocarbons (TRH)
- Polychlorinated Biphenyls (PCB)
- Metals including: As, Cd, Cr, Cr6+, Cu, Pb, Hg, Mo, Ni, Ag, Se, Sn, Zn
- Polycyclic Aromatic Hydrocarbons (PAH)
- Benzene, Toluene, Ethylbenzene and Xylene (BTEX)
- Cyanide, Total fluoride & pH
- Phenols
- Volatile Organic Compounds (VOC)
- Organochlorine Pesticides (OCP)

(7) OPP: Organophosphorus Pesticides

9 Findings

9.1 Field Observations

The subsurface lithology was noted to be generally homogenous across the Investigation Area. The fill soil profile was generally encountered to an average depth of approximately 0.6 m bgl.

A summary of the general soil profile encountered has been summarised in **Table 5** below.

Table 5: Generalised Soil Profile		
Approximate depth	Domain	Soil Description
0.0-0.6	FILL	<p><u>Clayey GRAVEL</u> – encountered from surface to an average depth of 0.6 m bgl with the exception of sampling locations BH1 where the fill profile extended to a depth of 0.7 m bgl.</p> <p>The Clayey GRAVEL fill profile comprised grey/brown, soft, dry to slightly moist, medium plasticity, minor brick, bitumen, glass fragments and significant gravels.</p>
0.6-1.0	NATURAL	<p><u>SILTY CLAY</u> – encountered generally below a depth of 0.6 m bgl.</p> <p>Comprised a generally homogenous grey/ brown, soft to firm, slightly moist, medium to high plasticity.</p>

A number of other key field observations noted during the soil assessment works are summarised in **Table 6**.

Table 6: Field Observations	
Surface Cover	The surface conditions comprised exposed soil with anthropogenic material in the form of bitumen, brick, glass and metal fragments were observed on the exposed surface soil and within the fill profile. Visible asbestos-containing material was not observed on the soil surface within the Investigation Area.
Staining	No visible staining was observed in the sampled soil or the soil generated during the sampling event.
Odours	No odours were encountered on the surface or within the soil profile.
PID Readings	Low PID concentrations (<0.3 ppm) were reported.
Waste/Rubble	Minor quantities of anthropogenic materials, (including gravels, bitumen, glass and brick) were identified within the fill soil. Visible asbestos-containing material was not observed during the sampling event.

Further details are provided in the borehole logs provided in **Appendix E** of this report.

9.2 Analytical Results

9.2.1 Investigation and Screening Levels

The soil analytical results reported contaminant concentrations less than the adopted investigation and screening levels with the exception of these outlined in in **Table 9** below.

The contaminant concentrations reported have been summarised against the investigation/screening levels in **Table A1** in the 'Tables' section of this report.

Table 7: Summary of Soil Analytical Result Exceedances

Investigation Area (soil domain)	Contaminant	Concentration Range (mg/kg)	No. samples analysed	Number of samples greater than investigation/screening levels					
				EIL/ESL	HIL/HS L 'A'	HIL/HS L 'B'	HIL/HS L 'C'	HIL/HS L 'D'	ML
Fill	Benzo(a)pyrene (BaP)	<0.5-3.6 (1.4)	10	3	-	-	-	-	-

* Adopted investigation/screening level provided in brackets.

9.2.2 Statistical Appraisal for Exceedances

Statistical analysis was undertaken on the soil analytical results collated as part of this assessment which were considered to represent a statistically relevant dataset.

In accordance with the NEPM 2013 Guidelines, soil concentrations for the Site are considered to be statistically below the nominated environmental value if the following are met:

- The 95% upper confidence limit (UCL) of the mean contaminant concentrations and the arithmetic mean of a contaminant are less than the relevant investigation/screening level;
- The standard deviation of the results are less than 50% of the relevant investigation or screening level; and
- No single value exceeds 250% of the relevant investigation or screening level.

For waste classification concentrations are considered to be statistically below the adopted criteria if the 95% UCL of the mean contaminant concentrations is less than the adopted criteria.

A summary of the results of the statistical analysis performed using ProUCL, a statistical program approved by EPA Victoria, is provided in **Table 10**. Detailed outputs of the statistical analysis are provided in the 'Tables' section of this report.

Table 8: Statistical Analysis Results

Contaminant	Number of Samples	NEPM (2013) Site Specific EILs (Fill)	Results (mg/kg)				Exceedance of adopted criteria (Y/N)
		Comm/Ind	Maximum Conc.	95% UCL	Mean	SD	
BaP	10	1.4	3.6	1.917 - 95% BCA Bootstrap UCL	2.375	1.352	Y

Based on the statistical appraisal provided above, concentrations of benzo(a)pyrene did not satisfy the NEPM statistical criteria in relation to ESLs for a Commercial/Industrial land use.

The ProUCL statistical calculation outputs have been provided as **Appendix F**.

9.2.3 Off-Site Disposal Waste Classification

To provide an indication of the off-site disposal category of soil within the Investigation Area, Prensa has compared the analytical results against the criteria specified in EPA Tasmania Information Bulletin No 105, 2018.

The contaminant concentrations reported have been summarised against the adopted criteria in the **Table A2** in the 'Tables' section of this report.

Based on the average thickness of the fill profile soil within the Investigation Area (estimated to be approximately 0.6 m), the volume of fill within the Investigation Areas is estimated to be approximately 120 m³ in-situ. The number of samples collected and analysed from the fill soil profile (i.e. ten (10)) was considered appropriate to adequately classify the fill profile soil within the Investigation, should off-site disposal of soil be undertaken.

The analytical results identified in Laboratory Report **826851-S** reported concentrations of contaminants of concern in the fill soil profile to be less than the Fill Material upper limits specified in Information Bulletin No 105, with the exception of copper. However, concentrations of copper were less than the Low Level Contaminated Soil - Level 2 upper limit. Concentrations of BaP and sum of total polycyclic aromatic hydrocarbons (PAH) exceeded the upper limits for Low Level Contaminated Soil - Level 2 but less than the Contaminated Soil - Level 3.

Based on the elevated total concentrations of copper, BaP and total PAH, the 95% upper confidence limit (UCL) of the mean contaminant concentrations was calculated. The 95% UCL of the mean copper concentration (71.38 mg/kg) was less than the Fill Material - Level 1 upper limits. The 95% UCL of the mean BaP concentration (1.917 mg/kg) and total PAH concentration (22.88 mg/kg) exceeded the Fill Material - Level 1 upper limits, however was less than the Low Level Contaminated Soil - Level 2.

Australian Standard Leaching Procedure (ASLP) analysis was conducted on the elevated BaP and total PAH concentrations. The ASLP analytical results reported in Laboratory Report **830197-L** indicated that the leachable concentrations of BaP and total PAH were less than the leached Low Level Contaminated Soil - Level 2 upper limits.

As such, the fill profile soil within the Investigation Area is categorised for the purposes of off-site disposal (should it be undertaken) as Low Level Contaminated Soil - Level 2. As outlined in EPA Tasmania Information Bulletin No 105, 2018, Low Level Contaminated Soil may, in some cases, be suitable for disposal as intermediate landfill cover at nominated municipal landfills. Therefore, given that the fill profile soil within the Investigation Area forms part of the larger McRobies Gully Waste Management Centre, consideration should be given to utilising this soil as landfill cover.

10 Quality Assurance & Quality Control

Prensa reviewed compliance with the procedures and acceptability limits specified in **Appendix H** of this report. The findings of the quality control and assurance review are presented below.

10.1 Quality Control Sampling and Analysis

10.1.1 Blind Replicate and Split Sample RPDs

Blind replicate and split samples were collected and analysed in accordance with the required frequency acceptability limits. The samples were analysed for the same parameters as the primary sample, as specified in **Section 8.4**. A large portion of the contaminants analysed reported concentrations less than the laboratory LOR, whereby relative percentage differences (RPDs) could not be calculated. RPDs were calculated for the quality control samples collected and analysed, where concentrations were reported greater than the laboratory LOR. Concentrations were noted to be within the acceptability limits and has been detailed in **Table 9**. Detailed results are provided in **Table A4** provided in the 'Tables' section of this report.

Table 9: Blind Replicate and Split Sample RPD Results

Quality Control Sample	Type	Primary Sample	RPD Exceedances/Comments
98633M_QC1	Blind Replicate	98633M_BH2_0.1	The RPDs reported were within or below the 30-50% range recommended in AS4482.1 with the exception of copper (-87%) and zinc (-110%).
98633M_QC2	Split Sample	98633M_BH2_0.1	The RPDs reported were within or below the 30-50% range recommended in AS4482.1 with the exception of lead (-151%).

The blind and split samples collected during the soil assessment generally reported RPDs within or less than the 30-50% range recommended in AS 4482.1-2005, with the exception of copper and zinc in the blind replicate and lead in the split replicate. The elevated RPDs are generally considered to be due to the low concentrations of contaminants reported or due to the heterogeneity of contamination in fill.

It is noted that the majority of the RPDs were less than the parameters specified in AS4482.1. Those replicate and duplicate samples which recorded excursions beyond the recommended RPDs are considered unlikely to impact the validity of the dataset and the findings of the assessment.

10.1.2 Rinsate, Field Blank and Trip Blanks

Rinsate, field blank and trip blank samples were collected and analysed during the investigation works at a frequency consistent with the acceptability limits. A summary of the blank sampling and analysis is provided in **Table 10**. The analysis of blank samples was reported to be within the acceptability limits. Detailed results are provided in **Table A5** provided in the 'Tables' section of this report.

Table 10: Blank Sample Results					
Type	Blank Sample ID	Date	Analysis		Results
Rinsate	98633M_R1	07/01/2021	TRH, Metals	BTEXN,	Concentrations less than LOR.
Field Blank	98633M_FB1	07/01/2021	NA		NA
Trip Blank	98633M_TB1	07/01/2021	TRH (C ₆ -C ₁₀)		Concentrations less than LOR.

LOR: Limit of Reporting

NA: Not analysed

10.2 Laboratory Quality Assurance/Quality Control

Review of the reports provided from the primary (Eurofins) and secondary (EnviroLab) laboratories indicated that NATA endorsed methods were used and the frequency and findings of laboratory quality control sampling were generally within the acceptability limits with the exception of those specified in **Table 11**.

Table 11: Laboratory Quality Control Sample Results	
Type	Non-Conformance
Spike	Selenium and zinc within laboratory report 826851-S

Whilst the matrix spike recovery was outside of the recommended acceptance criteria, an acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference. As such, it was considered that the laboratory methods adopted were appropriate and the results acceptable.

10.3 Sample Preservation, Handling and Holding Times

Review of sample receipt documentation provided by the laboratory indicated that:

- COC was completed correctly;
- Attempt to chill was evident;
- Appropriately preserved sample containers were used;
- All samples were received in good condition; and
- Sample containers for volatile analysis were received with zero headspace.

An evaluation of the laboratory sample extraction and analysis dates was also undertaken by Prensa. The review of the NATA laboratory reports indicated samples were extracted and analysed with recommended holding times adopted by the laboratory.

10.4 Data Validation

Based on the above, an assessment of the precision and accuracy of the analytical data has been made. While some quality control samples were reported outside the specified acceptability limits, these were not considered to significantly impact upon the representativeness of the data. The quality control results indicate that precision and accuracy of the data was within acceptability limits and the results from blind replicate and split sample analysis are comparable.

The results are therefore considered representative of analyte concentrations in the media assessed and are suitable for evaluating its contamination status.

11 Discussion

11.1 Desktop Review and Field Observations

The desktop review indicated that the Investigation Area formed part of a larger property which operated as the McRobies Gully Waste Management Centre, whilst the further surrounding area comprised National Park. Review of LISTmap documentation indicated that the Investigation Area and larger Site was not listed on the EPA Underground Petroleum Storage Systems, however, was listed as a Level 2 Activity on the EPA Regulated Premises Register. It was considered however, that given that Site as operational landfill has been subject to assessment, approval and ongoing surface, groundwater, leachate and final capping monitoring (specifically for areas where landfilling occurs), it would be unlikely that contamination associated with the landfill operations would impact upon the Investigation Area. In addition, given that the surrounding area comprised National Park, it was considered unlikely that off-site sources of contamination would impact the Site and/or Investigation Area.

The site inspection undertaken at the time of the soil sampling event observed the Investigation Area was located in the southern portion of the Site and formed part of the area of the Site which comprised and operated as the Resource Work Cooperative waste area. The wider landfill area of the McRobies Gully Waste Management Centre was located further north of the Investigation Areas and was accessed via McRobies Road, approximately 130 m north of the Investigation Areas at its closest point.

The fill profile soil encountered comprised clayey gravels to an average depth of 0.6 m bgl. Minor anthropogenic/building debris in the form of bitumen, brick, glass and metal fragments were observed on the exposed soil surface and within the fill profile soil. Visible evidence of staining or highly odorous soils noted which would suggest the presence of significantly contaminated soil was not observed within the Investigation Area. This was confirmed with the photo-ionization detector (PID) concentrations which reported concentrations of VOCs less than 0.3 ppm.

11.2 Risk to Environmental Value

Potential risks to the environmental values of land are summarised in Table 12 below.

Table 12: Risks to Beneficial Uses of Land		
Environmental Value	Required to be Protected?	Comments
Ecological	Yes	<p>The soil analytical results reported contaminant concentrations less than the EIL/ESLs for a commercial/industrial land use with the exception of benzo(a)pyrene (BaP) within the fill profile soil at three (3) sampling locations which exceeded the ecological screening level.</p> <p>However, Prensa considered it unlikely that the elevated BaP concentrations reported in discrete locations within the Investigation Area would pose a significant ecological risk to the highly modified ecosystems present within the Investigation Area, which have likely acclimatised to the soil conditions. In addition, the elevated BaP concentrations were vertically delineated with the underlying natural soil samples reporting concentrations of BaP either less than the laboratory limit of reporting (LOR) or less than the adopted ESL. As such, it was considered that the elevated BaP concentrations were limited to the fill profile soil and unlikely that the reported BaP concentrations would pose a significant ecological risk to the highly modified ecosystems present within the Investigation Area.</p>
Human health	Yes	<p>The soil analytical results reported contaminant concentrations less than the adopted HIL/HSLs, CRC Care HSLs and Management Limits.</p> <p>As such, It was considered unlikely that the reported contaminant concentrations would pose a risk to construction workers during the construction phase of the works and/or for future users of the Site in light of the proposed storage shed development.</p>
Buildings and structures	Yes	<p>Reported pH (as CaCl₂), chloride and sulphate within fill and natural soil on-site indicated a 'non aggressive' exposure classification for concrete and steel structures. As such, Prensa considers it unlikely that specialised materials would need to be considered and implemented to facilitate the construction of the proposed storage shed development.</p>
Aesthetics	Yes	<p>During the soil assessment, the fill and natural soils observed were generally free from waste with the exception of minor amounts of anthropogenic materials including brick, bitumen, metal and glass fragments within the fill profile layer. Soils within the Investigation Area were not odorous and no staining or discolouration was observed. As such, soil within the Investigation Area was considered unlikely to represent a significant aesthetic concern.</p>

11.3 Significance of Results

The field observations made during the soil assessment works identified the fill profile soil to be encountered to an average depth of 0.6 m bgl, with minor quantities of anthropogenic material observed throughout the profile and on the soil surface. Odorous and/or stained soil were not identified in the soil profile. This correlated with the soil analytical results which reported contaminant concentrations less than the adopted ecological and human health investigation/screening levels for a commercial/industrial land use. It was noted that elevated concentration of BaP were reported which exceeded the ecological screening level. However, it was considered unlikely that the elevated BaP concentrations reported in discrete locations within the Investigation Area would pose a significant ecological risk to the highly modified ecosystems present within the Investigation Area, which have likely acclimatised to the soil conditions. In addition, the elevated BaP concentrations were vertically delineated with the underlying natural soil samples reporting concentrations of BaP either less than the laboratory limit of reporting (LOR) or less than the adopted ESL. As such, it was considered that the elevated BaP concentrations were limited to the fill profile soil and unlikely that the reported BaP concentrations would pose a significant ecological risk to the highly modified ecosystems present within the Investigation Area.

As such, based on the findings of this SCA, it was considered that the potential for significant soil contamination to exist within the Investigation Area which may represent a potential ecological and/or health risk to construction workers during the construction phase of the works at the Site and for future users of the Site was low. Furthermore, based on the findings of this SCA, it was considered that further assessment and/or remedial works are not warranted.

In the event disposal of soil is required as an alternative to re-use, the fill profile soil within the Investigation Area is categorised as **Low Level Contaminated Soil - Level 2**, as specified in EPA Tasmania Information Bulletin No 105, 2018.

12 Conclusion

Prensa was engaged by Sedgwick to undertake a Soil Contamination Assessment (SCA) within a nominated area at McRobies Gully Waste Management Centre, 30 McRobies Road, South Hobart, Tasmania (the Site). The nominated area of the Site was denoted the 'Investigation Area' and has been illustrated in **Figure 1** attached.

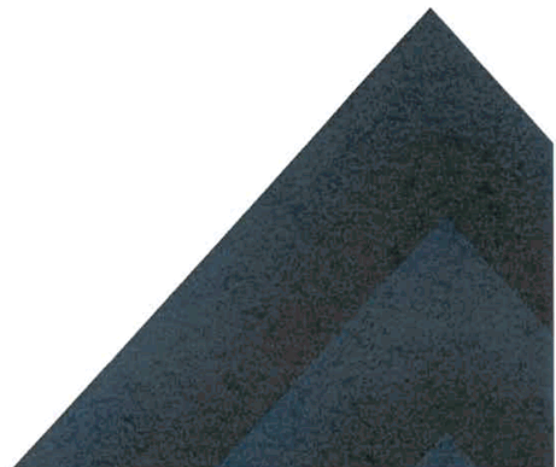
Based on the findings of the assessment, it was considered that the potential for significant soil contamination to exist within the Investigation Area which may represent a potential ecological and/or health risk to construction workers during the construction phase of the works at the Site and for future users of the Site was low. Furthermore, based on the findings of this SCA, it was considered that further assessment and/or remedial works are not warranted.

In light of these findings Prensa considered that the compliance requirements, specifically Condition PCL1 of the Potentially Contaminated Land Code- E2.6.2 of the Hobart Interim Planning Scheme 2015 have been met.

In the event disposal of soil is required as an alternative to re-use, the fill profile soil within the Investigation Area is categorised as **Low Level Contaminated Soil - Level 2**, as specified in EPA Tasmania Information Bulletin No 105, 2018.



Abbreviations



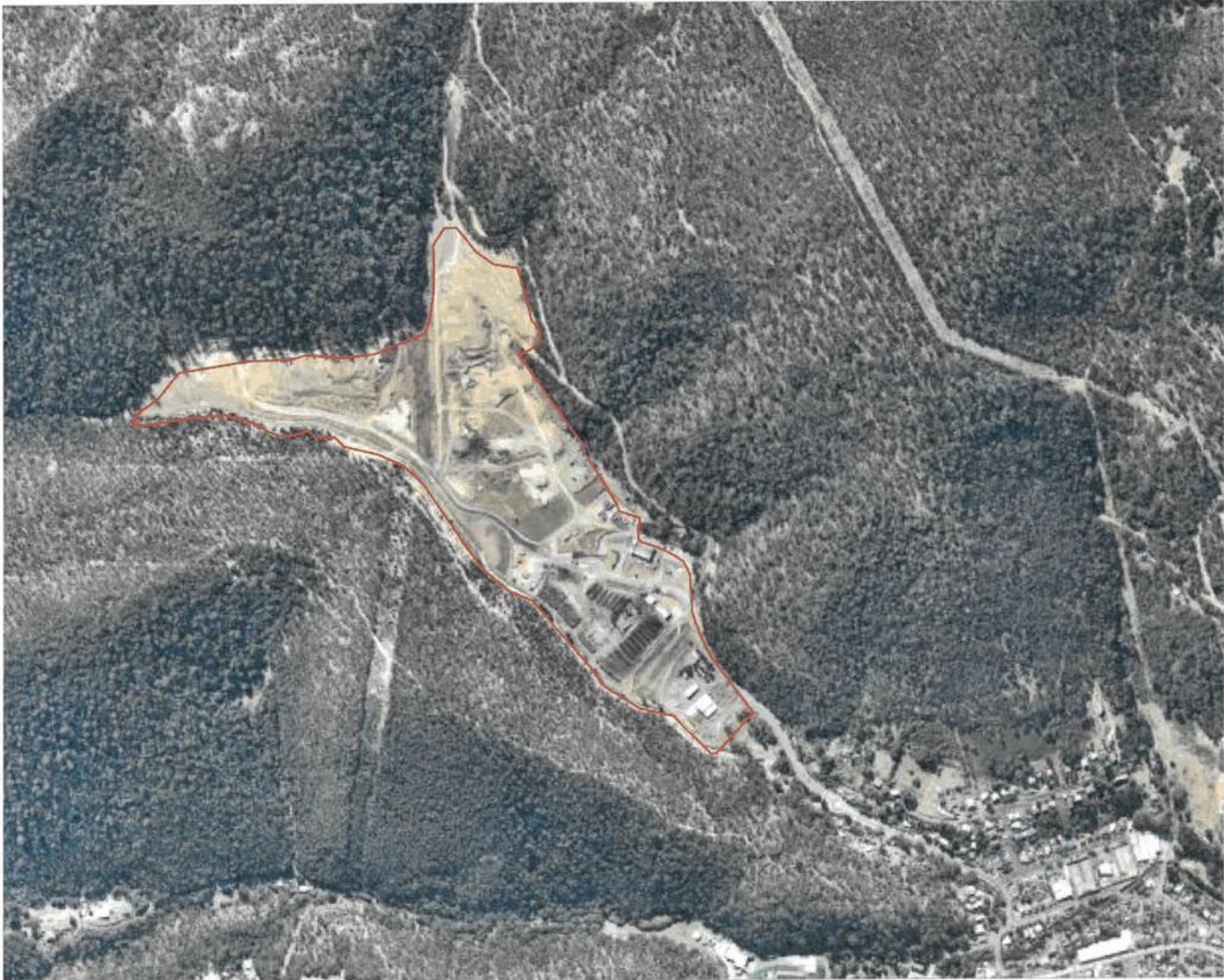
Abbreviation	Definition
ACM	Asbestos Containing Material
AHD	Australian Height Datum
AMG	Australian Map Grid
ANZECC	Australian & New Zealand Environment & Conservation Council
BaP	Benzo(a)pyrene
BGL	Below Ground Level
DSI	Detailed Site Investigation
EIL	Ecological Investigation Level
EPA	Environment Protection Authority
ESA	Environmental Site Assessment
ESL	Ecological Screening Level
HIL	Health Investigation Level
HSL	Health Screening Level
m	Metres
m ²	Square Metres (area)
MGA	Map Grid Australia
mg/L	Milligrams per Litre
MOE	Maintenance of Ecosystems
NATA	National Association of Testing Authorities
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
OCP	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PPM	Parts Per Million
PSI	Preliminary Site Investigation
QA	Quality Assurance
QC	Quality Control
SVOC	Semi-volatile Organic Compounds
SWL	Standing Water Level
TDS	Total Dissolved Solids
TRH	Total Recoverable Hydrocarbons
VOC	Volatile Organic Compounds



Figures



30 McRobies Rd, South Hobart, Tasmania
Site Location Plan



Not to scale - All locations are approximate

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Client: Sedgwick

Project: Hobart Tip Storage Shed SCA

Address: 30 McRobies Road
South Hobart TAS 7004

Legend:

Site Boundary

Investigation Area Boundary

Index Location Map:

Image Source: Google Maps Viewed: 04/10/2021

File Name:
98633M_Figures

Version:
1

Drawn By: SEW Checked By: RCS Date: 04/10/21 Figure number: 1

30 McRobies Rd, South Hobart, Tasmania
Sampling Location Plan



Not to scale - All locations are approximate

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Job No: 98633M

Client: Sedgwick

Project: Hobart Tip Storage Shed SCA

Address: 30 McRobies Road
South Hobart TAS 7004

Legend:

Investigation Area Boundary

Borehole Locations

Index Location Map:

Image Source: Google Maps

Viewed: 04/10/2021

File Name:
98633M_Figures

Version:
1

Drawn By:
SEW

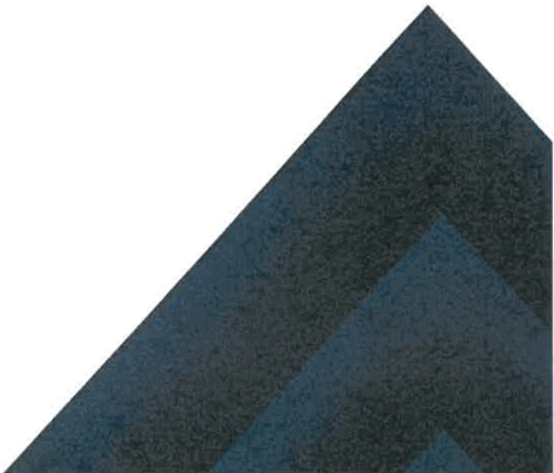
Checked By:
RCS

Date:
04/10/21

Figure number:
2



Tables




08633M: Hubert Tj Storage Shed SOA
 SC172: Sedgwick Claims Management
 McRobbie Gully Waste Management Centre, 30 McRobbie Road, South Hubert, 12404-914

Table A1: Summary of Analytical Results

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Metals														
	As	Ba	Be	B	Ca	Cr	Co	Cu	Fe	Pb	Mn	Hg	Ni	Se
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ECOL	2	10	2	10	0.4	1	5	5	20	5	5	0.1	5	2
NEPM (2013) EP, for Commercial/Industrial	160	2000	8	10	22	1.4	320	1670	800	150	810	1000	50	40
NEPM (2013) HSL for Commercial/Industrial, Fine Soil	160	2000	8	10	22	1.4	320	1670	800	150	810	1000	50	40
NEPM (2013) HSL D for Commercial/Industrial	3000	500	50000	900	3600	4000	240000	1500	60000	730	6000	10000	400000	400000
NEPM (2013) HSL D for Commercial/Industrial, Clay														
CRC CARE (2011) Direct Contact HSL D for Commercial/Industrial														
CRC CARE (2011) Direct Contact HSL for Intrusive Maintenance Workers														
AS2159-2009 Piling - Design and Installation for Concrete Piles, Silt and Clay														
AS2159-2009 Piling - Design and Installation for Steel Piles, Silt and Clay														
NEPM (2013) Management Limits for Residential/Parkland/Open Space, Fine Soil														
Field ID	Sampled Date-Time	Matrix Type	As	Ba	Be	B	Ca	Cr	Co	Cu	Fe	Pb	Mn	Hg
98633M_BH1_0.1	21/09/2021	SOIL	<2	-	-	-	<0.4	-	10	-	63	-	16	-
98633M_BH1_0.5	21/09/2021	SOIL	2.4	-	-	-	<0.4	-	12	-	47	-	43	-
98633M_BH1_1.0	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_0.1	21/09/2021	SOIL	<2	-	-	-	<0.4	-	<5	-	56	-	85	-
98633M_BH2_0.5	21/09/2021	SOIL	<2	-	-	-	<0.4	-	13	-	63	-	6	-
98633M_BH2_1.0	21/09/2021	SOIL	2.5	-	-	-	<0.4	-	13	-	51	27,000	7.9	-
98633M_BH3_0.1	21/09/2021	SOIL	2.2	-	-	-	<0.4	-	9	-	47	-	43	-
98633M_BH3_0.5	21/09/2021	SOIL	4.3	-	-	-	<0.4	-	17	-	39	-	68	-
98633M_BH3_1.0	21/09/2021	SOIL	2.6	-	-	-	<0.4	-	18	-	41	-	19	-
98633M_BH4_0.1	21/09/2021	SOIL	2.7	-	-	-	<0.4	-	14	-	51	-	38	-
98633M_BH4_0.5	21/09/2021	SOIL	3.1	-	-	-	<0.4	-	15	-	45	-	8.2	-
98633M_BH4_1.0	21/09/2021	SOIL	<2	<10	<2	<10	<0.4	<1	<5	5.2	52	7300	<5	65
98633M_BH5_0.1	21/09/2021	SOIL	4.4	-	-	-	<0.4	-	56	-	110	-	54	-
98633M_BH5_0.5	21/09/2021	SOIL	3	-	-	-	<0.4	-	14	-	5	-	7.5	-
98633M_BH5_1.0	21/09/2021	SOIL	-	-	-	-	<0.4	-	-	-	-	-	<0.1	<5

prensa 

15/10/2021
Page 2 of 9

05833M: Hubert T10 Storage Shed SCA
S0172: Sedgewick Claims Management
Mudobis Gully Waste Management Centre, 30 K/olobes Road, South Hobart, Tasmania

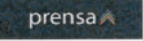
Table A1: Summary of Analytical Results

prensa

	PAH																	Physicochemical properties									
	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene	Benzo[e]pyrene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo[a]pyrene TEQ calc (Half)	Benzo[a]pyrene TEQ calc (Zero)	Benzo[a]pyrene TEQ (LOD)	PAHs (Sum of total)	Cation Exchange Capacity	pH (aqueous extract)	pH (Lab)	Conductivity (1:5 aqueous extract)	Moisture Content (dried @ 103°C)	% Iron (%)	% Total Organic Carbon
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	MEQ/100G	pH Units	pH Units	uS/cm	1	± 1mm (%)	± 1mm (%)
EQI	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.1	0.1	10	1	0.01	0.1
NEPM (2013) SIL for Commercial/Industrial														370													
NEPM (2013) SIL for Commercial/Industrial, Fine Soil					1.4																						
NEPM (2013) HSL D for Commercial/Industrial																		40	40	40	4000						
NEPM (2013) HSL D for Commercial/Industrial, Clay														NL													
CRC CARE (2011) Direct Contact HSL D for Commercial/Industrial													110000														
CRC CARE (2011) Direct Contact HSL for Intrusive Maintenance Workers												290000															
AS2150-2009 Piling - Design and Installation for Concrete Piles, Silt and Clay																											
AS2150-2009 Piling - Design and Installation for Steel Piles, Silt and Clay																											
NEPM (2013) Management Limits for Residential/Parkland/Open Space, Fine Soil																											
Field_ID	Sampled_Date-Time		Matrix_Type		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	13	-	-
98633M_BH1_0.1	21/09/2021		SOIL		0.8	0.5	1.5	3.1	3.4	1.8	2.9	2.8	3	0.7	12	1.5	3	<0.5	6.8	11	5.2	5.2	5.2	54.8	-	-	-
98633M_BH1_0.5	21/09/2021		SOIL		<0.5	<0.5	<0.5	0.5	0.9	<0.5	<0.5	0.8	0.8	<0.5	2.8	<0.5	0.7	<0.5	1	2.6	1.3	1	1.6	10.1	-	-	-
98633M_BH1_1.0	21/09/2021		SOIL		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	-	7	-	-
98633M_BH2_0.1	21/09/2021		SOIL		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	-	17	-	-
98633M_BH2_0.5	21/09/2021		SOIL		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	19	-	-	-
98633M_BH2_1.0	21/09/2021		SOIL		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	58	21	2.7	1.1
98633M_BH3_0.1	21/09/2021		SOIL		<0.5	<0.5	0.5	2.1	3.6	1.5	1.7	2.4	2.1	<0.5	5.9	<0.5	2.2	<0.5	2	6.2	4.6	4.4	4.9	30.2	-	-	-
98633M_BH3_0.5	21/09/2021		SOIL		<0.5	<0.5	1.2	0.7	0.8	0.9	0.7	0.5	1.1	<0.5	1.7	<0.5	0.6	<0.5	0.9	2	1.4	1.1	1.6	11.1	-	-	-
98633M_BH3_1.0	21/09/2021		SOIL		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	-	21	-	-
98633M_BH4_0.1	21/09/2021		SOIL		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	-	28	-	-
98633M_BH4_0.5	21/09/2021		SOIL		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	-	20	-	-
98633M_BH4_1.0	21/09/2021		SOIL		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	5.2	7.2	6.6	37
98633M_BH5_0.1	21/09/2021		SOIL		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	-	19	-	-
98633M_BH5_0.5	21/09/2021		SOIL		<0.5	<0.5	<0.5	1.1	1.7	0.8	0.9	0.9	0.9	<0.5	3.4	<0.5	0.7	<0.5	0.8	3.3	2.3	2.1	2.6	14.5	-	-	-
98633M_BH5_1.0	21/09/2021		SOIL		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	-	23	-	-

98633M: Inshore Tip Storage Shed SCA
50172: Sedgwick Claims Management
Moshabes Gully Waste Management Centre, 501/Colobies Road, South Robert, Tzaneen

Table A1: Summary of Analytical Results



			Anions and Cations			Inorganics	Phenols														Halogenated Benzenes									
	Chloride	Fluoride	Sulfate	Cyanide Total	2,4-dichlorophenol	2,4-dinitrophenol	2-methylphenol	2-nitrophenol	3,4-methylphenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-3-cyclohexyl phenol	4-chloro-3-methylphenol	4-nitrophenol	Cresol Total	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	1-chloro-2-nitrobenzene	Bromobenzene	Chlorobenzene	Hexachlorobenzene (HCB)					
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg				
TGL	5	100	90	5	0.5	5	0.2	1	0.4	0.5	20	1	5	0.5	0.5	1	20	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5					
NEPM (2013) EIL for Commercial/Industrial																														
NEPM (2013) EIL for Commercial/Industrial, Fine Soil																														
NEPM (2013) HSL D for Commercial/Industrial														25000	240000										80					
NEPM (2013) HSL D for Commercial/Industrial, Clay																														
CRC CARE (2011) Direct Contact HSL D for Commercial/Industrial																														
CRC CARE (2011) Direct Contact HSL D for Intrusive Maintenance Workers																														
AS2199-2009 Piling - Design and Installation for Concrete Piles, Silt and Clay			5000																											
AS2156-2009 Piling - Design and Installation for Steel Piles, Silt and Clay			5000																											
NEPM (2013) Management Limits for Residential/Parkland/Open Space, Fine Soil																														
Field_ID	Sampled Date/Time			Matrix Type																										
98633M_BH1_0.1	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH1_0.5	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH1_1.0	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH2_0.1	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH2_0.5	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH2_1.0	21/09/2021			SOIL			41	-	<30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH3_0.1	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH3_0.5	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH4_0.1	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH4_0.5	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH4_1.0	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH5_0.1	21/09/2021			SOIL			<5	<100	<30	<5	<0.5	<5	<0.2	<1	<0.4	<0.5	<20	<1	<5	<0.5	<0.5	<1	<20	<0.5	<0.5					
98633M_BH5_0.5	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
98633M_BH5_1.0	21/09/2021			SOIL			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					

98633M: Hobart Tip Storage Area SCA
 5021/2: Sedgwick Claims Management
 Metabolites Cully Waste Management Centre, 80 Morcles Road, South Hobart, Tasmania

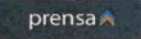
Table A1: Summary of Analytical Results

prensa

	Halogenated Hydrocarbons					Halogenated Phenols					Herbicides									
	1,2-dibromocyclohexane	1-bromocyclohexane	1,2-dichloro-4-fluorobenzene	1,2-dichlorobenzene	1,2-dichloroethane	2,4,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,6-dichlorophenol	2,4-dichlorophenol	2,4,5,7-T (Silvex)	2,4,5,7-T (Silvex)	2,4,5,7-T (Silvex)	2,4,5,7-T (Silvex)	2,4,5,7-T (Silvex)	2,4,5,7-T (Silvex)	2,4,5,7-T (Silvex)	2,4,5,7-T (Silvex)	2,4,5,7-T (Silvex)	2,4,5,7-T (Silvex)
ECOL	0.5	0.5	0.5	0.5	0.5	1	1	0.5	0.5	0.5	1	10	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM (2013) DL for Commercial/Industrial																				
NEPM (2013) FSL for Commercial/Industrial, Fine Soil																				
NEPM (2013) HSL D for Commercial/Industrial																				
NEPM (2013) HSL D for Commercial/Industrial, Clay																				
CRC CARE (2011) Direct Contact HSL D for Commercial/Industrial																				
CRC CARE (2011) Direct Contact HSL for Intrusive Maintenance Workers																				
A2129-2009 Piling - Design and Installation for Concrete Piles, Silt and Clay																				
A2159-2009 Piling - Design and Installation for Steel Piles, Silt and Clay																				
NEPM (2013) Management Limits for Residential/Parkland/Open Space, Fine Soil																				
Field ID	Sampled Date/Time					Matrix Type														
98633M_BH1_0.1	21/09/2021					SOIL														
98633M_BH1_0.5	21/09/2021					SOIL														
98633M_BH1_1.0	21/09/2021					SOIL														
98633M_BH2_0.1	21/09/2021					SOIL														
98633M_BH2_0.5	21/09/2021					SOIL														
98633M_BH2_1.0	21/09/2021					SOIL														
98633M_BH3_0.1	21/09/2021					SOIL														
98633M_BH3_0.5	21/09/2021					SOIL														
98633M_BH4_0.1	21/09/2021					SOIL														
98633M_BH4_0.5	21/09/2021					SOIL														
98633M_BH4_1.0	21/09/2021					SOIL														
98633M_BH5_0.1	21/09/2021					SOIL														
98633M_BH5_0.5	21/09/2021					SOIL														
98633M_BH5_1.0	21/09/2021					SOIL														

98633M: Hobart Hip Storage Shed SCA
50172: Sedgwick Climate Management
McRubbis Gully Waste Management Centre, 30 McRubbis Road, South Hobart, Tasmania

Table A1: Summary of Analytical Results



		OCP																							
		Organochlorine pesticides BPAVC	Other organochlorine pesticides BPAVC	4,4-DDDE	β-BHC	Aldrin	Aldrin + Dieldrin	β-BHC	chlordane	γ-BHC	DDE	DDT	DDT + DDE + DDD	Disinlin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	γ-BHC (1,1-dimethyl)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ECL		0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5
NEPM (2013) EIL for Commercial/Industrial																									
NEPM (2013) EIL for Commercial/Industrial, Fine Soil																									
NEPM (2013) HSL D for Commercial/Industrial							45		530				3600					100				50		2500	160
NEPM (2013) HSL D for Commercial/Industrial, Clay																									
CRC CARE (2011) Direct Contact HSL D for Commercial/Industrial																									
CRC CARE (2011) Direct Contact HSL D for Intrusive Maintenance Workers																									
AS2159-2008 Piling - Design and Installation for Concrete Piles, Silt and Clay																									
AS2159-2009 Piling - Design and Installation for Steel Piles, Silt and Clay																									
NEPM (2013) Management Limits for Residential/Parkland/Open Space, Fine Soil																									
Field_ID	Sampled_Date/Time	Matrix_Type																							
98633M_BH1_0.1	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH1_0.5	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH1_1.0	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH2_0.1	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH2_0.5	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH2_1.0	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH3_0.1	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH3_0.5	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH4_0.1	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH4_0.5	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH4_1.0	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH5_0.1	21/09/2021	SOIL	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
98633M_BH5_0.5	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
98633M_BH5_1.0	21/09/2021	SOIL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

98633M: Hobart Tip Storage Shed SCA
SOL72: Scudwick Claim Management
McRobies Culpy Waste Management Centre, 30 McRobies Road, South Hobart, Tasmania

Table A1: Summary of Analytical Results

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			OPP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
			Atrazine	Bolstar (Sulphos)	Chlorfeniphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos	Dinethion	Dissulfoton	Ethion	Fenproph	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitrothion	Fenitr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98633M: Robert Top Storage Shed SCA
50727: Sedgewick Claims Management
McRobles Gully Waste Management Centre, 30 McRobles Road, South Hobart, Tasmania

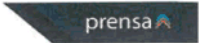
Table A1: Summary of Analytical Results



	Pesticides		PCB								SVOC		Solvents			
	Parathion	Triphenyl phosphor methyl	Aroclor 1248	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1238	Aroclor 1254	Aroclor 1260	PCBs (Sum of total)	EPN	Methyl Ethyl ketone	n- Methyl-2-pentanone	Acetone	Chloroform (High chlorine)	Carbon disulfide
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ECL	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.5	0.5	0.5	0.5
NEPM (2013) ECL for Commercial/Industrial																
NEPM (2013) ESL for Commercial/Industrial, Fine Soil																
NEPM (2013) HSL D for Commercial/Industrial										7						
NEPM (2013) HSL D for Commercial/Industrial, Clay																
CRC CARE (2011) Direct Contact HSL D for Commercial/Industrial																
CRC CARE (2011) Direct Contact HSL for Intrusive Maintenance Workers																
AS2159-2009 Piling - Design and Installation for Concrete Piles, Silt and Clay																
AS2159-2009 Piling - Design and Installation for Steel Piles, Silt and Clay																
NEPM (2013) Management Limits for Residential/Parkland/Open Space, Fine Soil																
Field ID	Sampled Date-Time		Matrix Type													
98633M_BH1_0.1	21/09/2021		SOIL													
98633M_BH1_0.5	21/09/2021		SOIL													
98633M_BH1_1.0	21/09/2021		SOIL													
98633M_BH2_0.1	21/09/2021		SOIL													
98633M_BH2_0.5	21/09/2021		SOIL													
98633M_BH2_1.0	21/09/2021		SOIL													
98633M_BH3_0.1	21/09/2021		SOIL													
98633M_BH3_0.5	21/09/2021		SOIL													
98633M_BH4_0.1	21/09/2021		SOIL													
98633M_BH4_0.5	21/09/2021		SOIL													
98633M_BH4_1.0	21/09/2021		SOIL													
98633M_BH5_0.1	21/09/2021		SOIL													
98633M_BH5_0.5	21/09/2021		SOIL													
98633M_BH5_1.0	21/09/2021		SOIL													

98633M: K-bar: Tip Storage Shed SCA
52/72: Sedgewick Chimney Management
McLeans Gully Waste Management Centre, 30 McLeans Road, South Hobart, Tasmania

Table A1: Summary of Analytical Results



		Chlorinated Hydrocarbons																												Organic	Other																																																																																																																																																																																																																																																																																																																																																																																																																					
		1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,2-dichloroethane	1,2-dichloroethene	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-dichloropropane	1,2-d

98633M: Hobart Tip Storage Shed SCA
 50172: Sedgewick Claims Management
 McRobles Fully Waste Management Centre, 80 McRobles Road, South Hobart, Tasmania

Table A2: Summary of Analytical Results

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	Physiochemical properties								Anions and Cations			Inorganics
	Cation Exchange Capacity	pH (aqueous extract)	pH (lab)	Conductivity (1.5 aqueous extract)	Moisture Content (dried @ 103°C)	Iron (%)	% Clay*	Total Organic Carbon	Chloride	Fluoride	Sulphate	Cyanide Total
	MEQ/100G	pH Units	pH Units	uS/cm	%	%	%	%	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.1	0.1	10	1	0.01	1	0.1	5	100	30	5
Information Bulletin No 103 Contaminated Soil - Level 1										1000		2500
Information Bulletin No 105 Low Level Contaminated Soil - Level 2										3000		1000
Information Bulletin No 106 Fill Material - Level 1		<4 or >9								300		32
Field ID	Sampled Date	Matrix Type										
98633M_BH1_0.1	21/09/2021	SOIL	-	-	-	13	-	-	-	-	-	-
98633M_BH1_0.5	21/09/2021	SOIL	-	-	-	18	-	-	-	-	-	-
98633M_BH2_0.1	21/09/2021	SOIL	-	-	-	7	-	-	-	-	-	-
98633M_BH2_0.5	21/09/2021	SOIL	-	-	-	17	-	-	-	-	-	-
98633M_BH2_1.0	21/09/2021	SOIL	19	-	7.5	58	21	2.7	10	1.1	41	<30
98633M_BH3_0.1	21/09/2021	SOIL	-	-	-	21	-	-	-	-	-	-
98633M_BH3_0.5	21/09/2021	SOIL	-	-	-	22	-	-	-	-	-	-
98633M_BH4_0.1	21/09/2021	SOIL	-	-	-	21	-	-	-	-	-	-
98633M_BH4_0.5	21/09/2021	SOIL	-	-	-	28	-	-	-	-	-	-
98633M_BH4_1.0	21/09/2021	SOIL	-	-	-	20	-	-	-	-	-	-
98633M_BH5_0.1	21/09/2021	SOIL	5.2	7.2	6.6	37	9.2	0.73	<1	0.4	<5	<100
98633M_BH5_0.5	21/09/2021	SOIL	-	-	-	19	-	-	-	-	-	-
98633M_BH5_1.0	21/09/2021	SOIL	-	-	-	23	-	-	-	-	-	-

98633M: Hobart Tip Storage Shed SCA
S07/12: Subgrade Claims Management
McRoberts Gully Waste Management Centre, 30 McRoberts Road, South Hobart, Tasmania

Table A2: Summary of Analytical Results

prensa

	Metals																		TRH													
	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (Hexavalent)	Chromium (III+VI)	Cobalt	Copper	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin	Zinc	C6-C10	F1 (C6-C10 less BTEX)	C10-C16	F2 (C10-C16 less NAPHTHALENE)	F3 (C16-C34)	F4 (C34-C40)	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10 - C36 (Sum of total)	C10 - C40 (Sum of total)		
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
EQL	2	10	2	10	0.4	1	5	5	5	5	5	0.1	5	5	2	2	10	5	20	20	50	50	100	100	20	20	50	50	50	100		
Information Bulletin No 105 Contaminated Soil - Level 1	100	1000	10	100	100	200	1000	100	1000	1000	1000	100	1000	1000	100	100	100	1000	100	100	100	100	100	100	100	100	100	100	100	100	100	
Information Bulletin No 105 Low Level Contaminated Soil - Level 2	200	2000	40	40	200	200	2000	1200	5000	30	1000	600	50	180	500	14000																
Information Bulletin No 105 Fill Material - Level 1	20	300	2	3	1	100	100	300	500	1	10	60	10	10	50	200																
Field_ID	Sampled Date	Matrix_Type																														
98633M_BH1_0.1	21/09/2021	SOIL	<2	-	-	-	<0.4	-	10	-	63	16	-	<0.1	<5	23	<2	<2	<10	39	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<100
98633M_BH1_0.5	21/09/2021	SOIL	2.4	-	-	-	<0.4	-	12	-	47	43	-	<0.1	<5	25	<2	<2	<10	75	<20	<20	<50	<50	280	<100	<20	<20	170	140	310	280
98633M_BH2_0.1	21/09/2021	SOIL	<2	-	-	-	<0.4	-	<5	-	56	85	-	<0.1	<5	12	<2	<2	<10	19	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<100
98633M_BH2_0.5	21/09/2021	SOIL	<2	-	-	-	<0.4	-	13	-	63	6	-	<0.1	<5	21	<2	<2	<10	31	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<100
98633M_BH2_1.0	21/09/2021	SOIL	2.5	-	-	-	<0.4	-	13	-	51	7.9	-	<0.1	<5	19	<2	<2	<10	33	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<100
98633M_BH3_0.1	21/09/2021	SOIL	2.2	-	-	-	<0.4	-	9	-	47	43	-	<0.1	<5	15	<2	<2	<10	45	<20	<20	<50	<50	200	<100	<20	<20	120	95	215	200
98633M_BH3_0.5	21/09/2021	SOIL	4.3	-	-	-	<0.4	-	17	-	39	68	-	0.1	<5	18	<2	<2	<10	68	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<100
98633M_BH4_0.1	21/09/2021	SOIL	2.6	-	-	-	<0.4	-	18	-	41	19	-	<0.1	<5	18	<2	<2	<10	63	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<100
98633M_BH4_0.5	21/09/2021	SOIL	2.7	-	-	-	<0.4	-	14	-	51	38	-	<0.1	<5	21	<2	<2	<10	75	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<100
98633M_BH4_1.0	21/09/2021	SOIL	3.1	-	-	-	<0.4	-	15	-	<5	8.2	-	<0.1	<5	<5	<2	<2	<10	19	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<100
98633M_BH5_0.1	21/09/2021	SOIL	<2	<10	<2	<10	<0.4	<1	<5	5.2	52	<5	65	<0.1	<5	11	<2	<2	<10	10	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<100
98633M_BH5_0.5	21/09/2021	SOIL	4.4	-	-	-	<0.4	-	56	-	110	54	-	0.2	<5	18	<2	<2	<10	90	<20	<20	<50	<50	100	<100	<20	<20	61	60	121	100
98633M_BH5_1.0	21/09/2021	SOIL	3	-	-	-	<0.4	-	14	-	5	7.5	-	<0.1	<5	<5	<2	<2	<10	21	<20	<20	<50	<50	<100	<100	<20	<20	<50	<50	<50	<100

98633M Hobart Tip Storage Shed SCA
 50172 Sedgwick Claims Management
 Microbites Gully Waste Management Centre, 30 T/Robbles Road, South Hobart, Tasmania

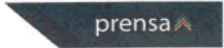
Table A2: Summary of Analytical Results

prensa

EQL	MAH											PAH																						
	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Benzene	Ethylbenzene	Isopropylbenzene (Cumene)	Styrene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total MAH	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOA)	PAHs (Sum of total)			
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
0.5	0.5	0.1	0.1	0.5	0.5	0.1	0.1	0.2	0.1	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
Information Bulletin No 105 Contaminated Soil - Level 1			5	100		100				180						2																20		
Information Bulletin No 105 Low Level Contaminated Soil - Level 2			5	100		100				180						2																40		
Information Bulletin No 105 Fill Material - Level 1			1	3			1			14						0.08																20		
Field_ID	Sampled Date		Matrix_Type																															
98633M_BH1_0.1	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
98633M_BH1_0.5	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	0.8	0.5	1.5	3.1	3.4	1.8	2.9	2.8	3	0.7	12	1.5	3	<0.5	6.8	11	5.2	5.2	54.8	
98633M_BH2_0.1	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
98633M_BH2_0.5	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
98633M_BH2_1.0	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
98633M_BH3_0.1	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	0.5	2.1	3.6	1.5	1.7	2.4	2.1	<0.5	5.9	<0.5	2.2	<0.5	2	6.2	4.6	4.4	4.9	30.2
98633M_BH3_0.5	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	1.2	0.7	0.8	0.9	0.7	0.5	1.1	<0.5	1.7	<0.5	0.6	<0.5	0.9	2	1.4	1.1	1.6	11.1
98633M_BH4_0.1	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
98633M_BH4_0.5	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
98633M_BH4_1.0	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
98633M_BH5_0.1	21/09/2021	21/09/2021	SOIL	<0.5	<0.5	<0.1	<0.1	<0.5	<0.5	<0.1	<0.2	<0.1	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
98633M_BH5_0.5	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	<0.5	1.1	1.7	0.8	0.9	0.9	0.9	<0.5	3.4	<0.5	0.7	<0.5	0.8	3.3	2.3	2.1	2.6	14.5
98633M_BH5_1.0	21/09/2021	21/09/2021	SOIL	-	-	<0.1	<0.1	-	-	<0.1	<0.2	<0.1	<0.3	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

98633M: Hobart Tip Storage Shed SCA
S9172: Sedgwick Claims Management
120 Rubies Gully Waste Management Centre, 33 McRobbies Road, South Hobart, Tasmania

Table A2: Summary of Analytical Results



			Phenols										Halogenated Benzenes										Halogenated Hydrocarbons					
			2,4-dimethylphenol	2,4-dinitrophenol	2-methylphenol	2-nitrophenol	3,4,5-methylphenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-6-cyclohexyl phenol	4-chloro-3-methylphenol	4-nitrophenol	Cresol Total	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	4-chlorotoluene	Bromobenzene	Chlorobenzene	Hexachlorobenzene (HCB)	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Iodomethane	Trichlorofluoromethane
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	5	0.2	1	0.4	0.5	20	1	5	0.5	0.5	1	20	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.5	0.5	0.5	0.5	0.5
Information Bulletin No 105 Low Level Contaminated Soil - Level 1																												
Information Bulletin No 105 Low Level Contaminated Soil - Level 2																												
Information Bulletin No 105 Fill Material - Level 1												25																
Field ID	Sampled Date	Matrix Type																										
98633M_BH1_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH1_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_1.0	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH3_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH3_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_1.0	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH5_0.1	21/09/2021	SOIL	<0.5	<5	<0.2	<1	<0.4	<0.5	<20	<1	<5	<0.5	<0.5	<1	<20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5
98633M_BH5_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH5_1.0	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

98633M: Hobart Tip Storage Shed SCA
50172: Sedgwick Claims Management
McRobies Gully Waste Management Centre, 30 McRobies Road, South Hobart, Tasmania

Table A2: Summary of Analytical Results



Halogenated Phenols								Herbicides									
	2,4,5-trichlorophenol	2,4,6-trichlorophenol	2,4-dichlorophenol	2,6-dichlorophenol	2-chlorophenol	Pentachlorophenol	Tetrachlorophenols	2,4,5-Trichlorophenoxy Acetic Acid (2,4,5-T)	2,4,5-TP (Silver)	Metolachl (2,4-D)	2,4-Dichloroprop	4-(2,4-Dichlorophenoxy)butyric Acid (2,4-DB)	Dicamba	Chlorazab	2-Methyl-4-chlorophenoxyacetic acid (MCPA)	2-Methyl-4-Chlorophenoxy Butanoic Acid (MCPB)	Mecoprop
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ECL	1	1	0.5	0.5	0.5	1	10	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Information Bulletin No 105 Low Level Contaminated Soil - Level 2																	
Information Bulletin No 105 Fill Material - Level 1																	
Field_ID	Sampled Date		Matrix_Type														
98633M_BH1_0.1	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH1_0.5	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_0.1	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_0.5	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_1.0	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH3_0.1	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH3_0.5	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_0.1	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_0.5	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_1.0	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH5_0.1	21/09/2021		SOIL	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
98633M_BH5_0.5	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH5_1.0	21/09/2021		SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-

98633V: Hubart Tip Storage Shed SCA
50172: Sedgwick Claims Management
McRobles Gully Waste Management Centre, 30 McRobles Road, South Hobart, Tasmania

Table A2: Summary of Analytical Results



		OCP																							
		Organochlorine pesticides EPA/Vic	Other organochlorine pesticides EPA/Vic	4,4-DDE	p-BHC	Aldrin	Aldrin + Dieldrin	p-BHC	Chlordane	o-BHC	DDD	DDT	DDT + DDE + DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	p-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQIL		0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5
Information Bulletin No 105 Contaminated Soil - Level 1																									
Information Bulletin No 105 Low Level Contaminated Soil - Level 2																									
Information Bulletin No 105 Fill Material - Level 1						2							2												
Field_ID	Sampled Date	Matrix_Type																							
98633M_BH1_0.1	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH1_0.5	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_0.1	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_0.5	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_1.0	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH3_0.1	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH3_0.5	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_0.1	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_0.5	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_1.0	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH5_0.1	21/09/2021	SOIL		<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
98633M_BH5_0.5	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH5_1.0	21/09/2021	SOIL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

98633M: Hobart Tip Storage Shed SCA
54122: Sedgewick Claims Management
McRoberts Gully Waste Management Centre, 30 McRoberts Road, South Hobart, Tasmania

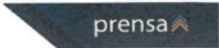
Table A2: Summary of Analytical Results

prensa

		OPP																													
		Azinphos methyl	Isolstar (Sulprofos)	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion	Ethoprop	Fenitrothion	Fensulfotihion	Fenthion	Malathion	Merphos	Mesetyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoite	Phorate	Pyrazophos	Ronnel	Terbufos	Trichloronate	Tetrachlorophos
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.2	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Information Bulletin No 105 Contaminated Soil - Level 1																															
Information Bulletin No 105 Low Level Contaminated Soil - Level 2																															
Information Bulletin No 105 Fill Material - Level 1																															
Field_ID	Sampled Date	Matrix_Type																													
98633M_BH1_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH1_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH2_1.0	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH3_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH3_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH4_1.0	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH5_0.1	21/09/2021	SOIL	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
98633M_BH5_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98633M_BH5_1.0	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

98633M: Hobart Tip Storage Shed SCA
50171: Sedgwick Claims Management
McRobbles Gully Waste Management Centre, 30 McRobbles Road, South Hobart, Tasmania

Table A2: Summary of Analytical Results

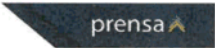


	Pesticides		PCB								
	Parathion	Priniphos-methyl	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Information Bulletin No 105 Contaminated Soil - Level 1											
Information Bulletin No 105 Low Level Contaminated Soil - Level 2											20
Information Bulletin No 105 Fill Material - Level 1											2

Field ID	Sampled Date	Matrix Type									
98633M_BH1_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH1_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH2_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH2_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH2_1.0	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH3_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH3_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH4_0.1	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH4_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH4_1.0	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH5_0.1	21/09/2021	SOIL	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
98633M_BH5_0.5	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-
98633M_BH5_1.0	21/09/2021	SOIL	-	-	-	-	-	-	-	-	-

98633M: Hobart Tip Storage Shed SCA
S0172: Sedgewick Claims Management
McRobbie Gully Waste Management Centre, 30 McRobbie Road, South Hobart, Tasmania

Table A2: Summary of Analytical Results - Leached



		Physicochemical properties																
		pH (initial)	PAH															
			Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene	Benzo[e]pyrene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-c,d]pyrene	Naphthalene	Phenanthrene	Pyrene
pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
EQI	0.1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Information Bulletin No 105 Contaminated Soil ASLP - Level 3						0.0050												
Information Bulletin No 105 Low Level Contaminated Soil ASLP - Level 2						0.0005												0.0005
Field_ID	Sampled Date																	
98633M_BH1_0.5	21/09/2021	7	0.012	0.0042	0.0083	< 0.00001	< 0.00005	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.0051	0.011	< 0.00001	0.0018	0.04	0.0037	0.0034179
98633M_BH3_0.1	21/09/2021	6.7	< 0.01	< 0.00001	< 0.00001	< 0.01	< 0.00005	< 0.00005	< 0.00006	< 0.00007	< 0.00008	< 0.00009	< 0.01	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00005
98633M_BH3_0.5	21/09/2021	6.6	< 0.00001	< 0.00001	< 0.00002	< 0.00003	< 0.00005	< 0.00005	< 0.00006	< 0.00007	< 0.00008	< 0.00009	< 0.00010	< 0.00001	< 0.00002	< 0.00003	< 0.00004	< 0.00005
98633M_BH5_0.5	21/09/2021	6.6	< 0.00001	< 0.00001	< 0.00002	< 0.00003	< 0.00005	< 0.00005	< 0.00006	< 0.00007	< 0.00008	< 0.00009	< 0.00010	< 0.00001	< 0.00002	< 0.00003	< 0.00004	< 0.00005

Table A4: Quality Control Sample
Results Summary

98633M: Hobart Tip Storage Shed SCA
 50172: Sedgwick Claims Management
 McRobies Gully Waste Management Centre, 30 McRobies Road, South Hobart, Tasmania

SDG		23-Sep-21	23-Sep-21	23-Sep-21	23-Sep-21
Field ID		98633M_BH2_0.1	98633M_QC1	98633M_BH2_0.1	98633M_QC2
Sampled Date/Time		21/09/2021	21/09/2021	21/09/2021	21/09/2021
Chem_Group	ChemName	Units	EQ	RPD	
Physicochemical properties	Moisture Content (dried @ 103°C)	%	1	6.2	12
Metals	Arsenic	mg/kg	2 (Primary); 4 (Interlab)	<2.0	NC
	Cadmium	mg/kg	0.4	<0.4	NC
	Chromium (III+VI)	mg/kg	5 (Primary); 1 (Interlab)	<5.0	NC
	Copper	mg/kg	5 (Primary); 1 (Interlab)	56.0	87
	Lead	mg/kg	5 (Primary); 1 (Interlab)	85.0	NC
	Mercury	mg/kg	0.1	<0.1	NC
	Molybdenum	mg/kg	5 (Primary); 1 (Interlab)	<5.0	NC
	Nickel	mg/kg	5 (Primary); 1 (Interlab)	12.0	NC
	Selenium	mg/kg	2	<2.0	NC
	Silver	mg/kg	2 (Primary); 1 (Interlab)	<2.0	NC
	Tin	mg/kg	10 (Primary); 1 (Interlab)	<10.0	NC
	Zinc	mg/kg	5 (Primary); 1 (Interlab)	19.0	110
TRH	G6-C10	mg/kg	20 (Primary); 25 (Interlab)	<20.0	NC
	F1 (G6-C10 less BTEX)	mg/kg	20 (Primary); 25 (Interlab)	<20.0	NC
	C10-C16	mg/kg	50	<50.0	NC
	F2 (C10-C16 less NAPHTHALENE)	mg/kg	50	<50.0	NC
	F3 (C16-C34)	mg/kg	100	<100.0	NC
	F4 (C34-C40)	mg/kg	100	<100.0	NC
	G6 - C9	mg/kg	20 (Primary); 25 (Interlab)	<20.0	NC
	C10 - C14	mg/kg	20 (Primary); 50 (Interlab)	<20.0	NC
	C15 - C28	mg/kg	50 (Primary); 100 (Interlab)	<50.0	NC
	C29-C36	mg/kg	50 (Primary); 100 (Interlab)	<50.0	NC
	+C10 - C36 (Sum of total)	mg/kg	50	<50.0	NC
	C10 - C40 (Sum of total)	mg/kg	100 (Primary); 50 (Interlab)	<100.0	NC
MAH	Benzene	mg/kg	0.1 (Primary); 0.2 (Interlab)	<0.1	NC
	Ethylbenzene	mg/kg	0.1 (Primary); 1 (Interlab)	<0.1	NC
	Toluene	mg/kg	0.1 (Primary); 0.5 (Interlab)	<0.1	NC
	Xylene (m & p)	mg/kg	0.2 (Primary); 2 (Interlab)	<0.2	NC
	Xylene (o)	mg/kg	0.1 (Primary); 1 (Interlab)	<0.1	NC
	Xylene Total	mg/kg	0.3 (Primary); 1 (Interlab)	<0.3	NC
PAH	Acenaphthene	mg/kg	0.5 (Primary); 0.1 (Interlab)	<0.5	NC
	Acenaphthylene	mg/kg	0.5 (Primary); 0.1 (Interlab)	<0.5	NC
	Anthracene	mg/kg	0.5 (Primary); 0.1 (Interlab)	<0.5	NC
	Benz(a)anthracene	mg/kg	0.5 (Primary); 0.1 (Interlab)	<0.5	NC
	Benzo(a)pyrene	mg/kg	0.5 (Primary); 0.05 (Interlab)	<0.5	NC
	Benzo(b)fluoranthene	mg/kg	0.5	<0.5	NC
	Benzo(k)fluoranthene	mg/kg	0.5	<0.5	NC
	Benzo(g,h,i)perylene	mg/kg	0.5 (Primary); 0.1 (Interlab)	<0.5	NC
	Chrysene	mg/kg	0.5 (Primary); 0.1 (Interlab)	<0.5	NC
	Dibenz(a,h)anthracene	mg/kg	0.5 (Primary); 0.1 (Interlab)	<0.5	NC

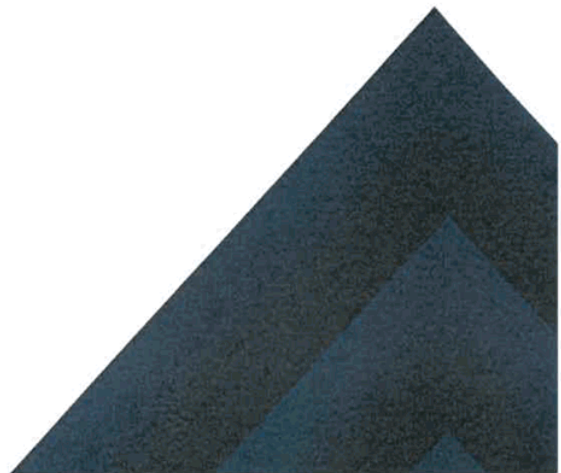
98633M: Hobart Tip Storage Shed SCA
S0172: Sedgwick Claims Management
McRobies Gully Waste Management Centre, 30 McRobies Road, South Hobart, Tasmania

Table A5: Quality Control Sample
Results Summary

		SDG		23-Sep-21		23-Sep-21	
		Field ID		98633M_R1		98633M_R1	
		Sampled Date/Time		21/09/2021		21/09/2021	
		Sample Type		Rinsate		Tri	
Chem_Group	ChemName	Units	EQL				
MAH	Benzene	µg/l	1	<1			
	Ethylbenzene	µg/l	1	<1			
	Toluene	µg/l	1	<1			
	Xylene (m & p)	µg/l	2	<2			
	Xylene (o)	µg/l	1	<1			
	Xylene Total	µg/l	3	<3			
Metals	Arsenic	µg/l	1	<1			
	Cadmium	µg/l	0.2	<0.2			
	Chromium (III+VI)	µg/l	1	<1			
	Copper	µg/l	1	<1			
	Lead	µg/l	1	<1			
	Mercury	µg/l	0.1	<0.1			
	Molybdenum	µg/l	5	<5			
	Nickel	µg/l	1	<1			
	Selenium	µg/l	1	<1			
	Silver	µg/l	5	<5			
	Tin	µg/l	5	<5			
	Zinc	µg/l	5	<5			
PAH	Acenaphthene	µg/l	1	<1			
	Acenaphthylene	µg/l	1	<1			
	Anthracene	µg/l	1	<1			
	Benzo(a)anthracene	µg/l	1	<1			
	Benzo(a)pyrene	µg/l	1	<1			
	Benzo(b+g)fluoranthene	µg/l	1	<1			
	Benzo(k)fluoranthene	µg/l	1	<1			
	Benzo(g,h,i)perylene	µg/l	1	<1			
	Chrysene	µg/l	1	<1			
	Dibenz(a,h)anthracene	µg/l	1	<1			
	Fluoranthene	µg/l	1	<1			
	Fluorene	µg/l	1	<1			
	Indeno(1,2,3-c,d)pyrene	µg/l	1	<1			
	Naphthalene	µg/l	1	<10			



Photographs





COUNCIL CERTIFICATE

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

APPROVAL BY LOCAL AUTHORITY

The subdivision shown in this Plan
is approved

Insert here any
qualification to
the approval
under section 468(12),
section 472 or
section 477B of
the Local Government
Act 1962.
Rule through any
blank space.

THE COUNCIL CANNOT PROVIDE A SUPPLY
OF WATER ABOVE THE 213.0m CONTOUR
BASED ON STATE DATUM



In witness whereof the common seal of the HOBART CITY

COUNCIL

has been hereunto affixed, pursuant to a resolution of the Council of the
said municipality passed the 24th day of MARCH 1974,
in the presence of us

Members MANAGER - SURVEYING
SERVICES

Council Clerk
DIRECTOR OF PLANNING & DEVELOPMENT
SERVICES

COUNCILS REFERENCE 716.1

TO BE COMPLETED WHEN ADDITIONAL
SHEETS ARE ANNEXED:

Detailed drawings of the parcels shown in this
plan are contained in the additional sheet/s
annexed hereto and signed by us

Ray Lawick per P.D. RICHMOND
Surveyor

SKING
Council Clerk
MANAGER - SURVEYING SERVICES

TO BE COMPLETED AND SIGNED
BY COUNCIL CLERK OR OWNER

For the purposes of section 464 of the Local
Government Act 1962, the owner has nominated/
I nominate

As his/my solicitor *Robert Mitchell & Alpert*

As his/my surveyor *Boots Lock & Carrick*

SKING
Council Clerk/Owner
MANAGER - SURVEYING SERVICES

TO BE FILLED IN BY SURVEYOR

Survey commenced *6.11.93*

Survey finished *20.12.93*

Error of Close

OFFICE EXAMINATION

Plot Checked

Mathematically Checked *C.W. 19.4.94*

Examined as to boundaries *SG. 20.4.94*

Entered on Card

Surveyor's Certificate

I, *Peter David Richmond*
of *Midway Point*

in Tasmania, registered surveyor, hereby certify that this
plan:

Requires the approval of the local authority, which has
been obtained (or, does not require the approval
of any local authority)

Dated this *21st* day of *December* 19*93*

Ray Lawick per P.D. RICHMOND
Registered Surveyor

Surveyors Reference *93139*

prensa



1. Investigation Area, looking north –Minor brick, glass and bitumen fragments on soil surface



2. Investigation Area, looking north –Minor brick, glass and bitumen fragments on soil surface



3. Investigation Area, looking south –Minor brick, glass and bitumen fragments on soil surface



4. Soil cuttings from sampling location BH1 – significant gravels.



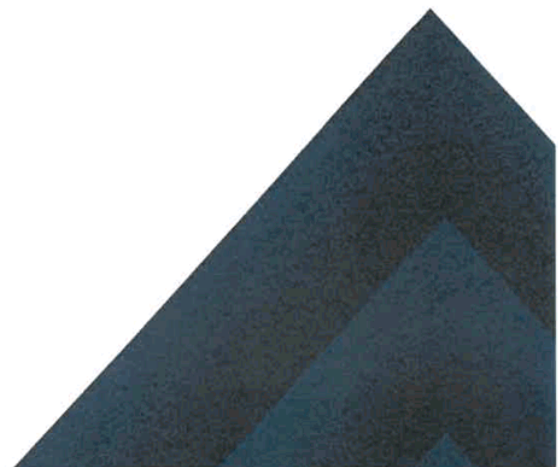
5. Soil cuttings from sampling location BH5 – significant gravels.



6. Soil surface - Minor brick, glass and bitumen fragments on soil surface

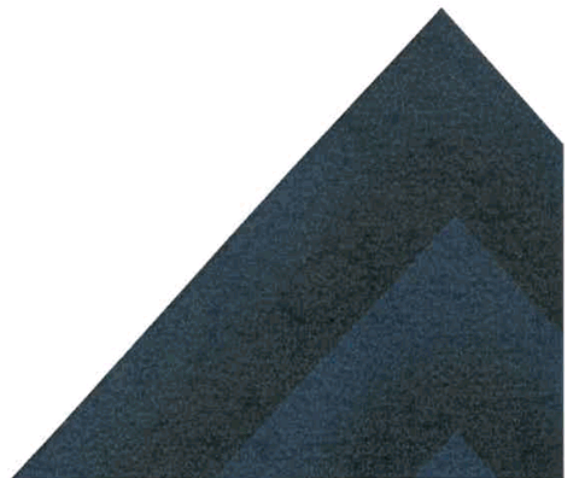


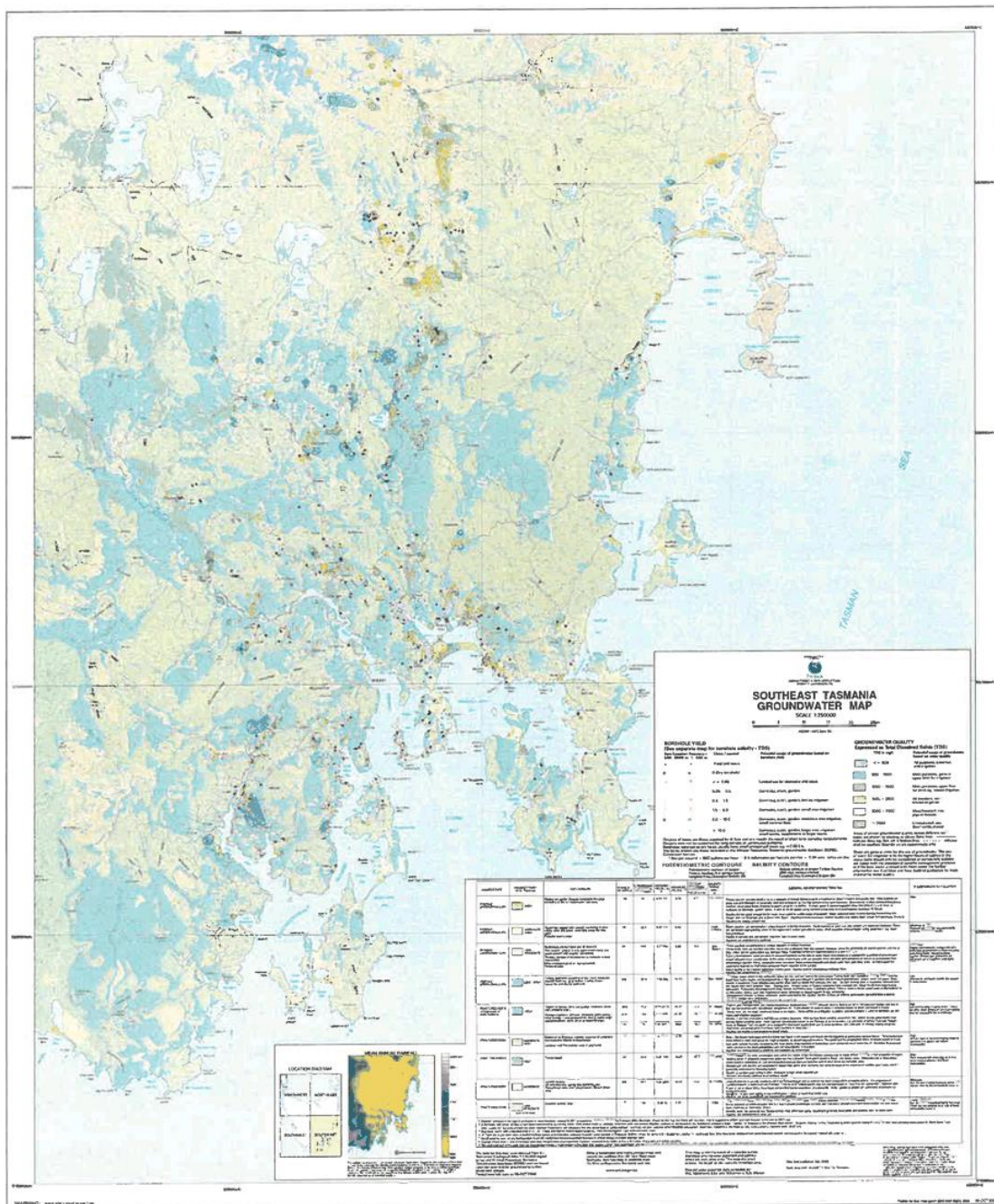
Appendix A: Property Report

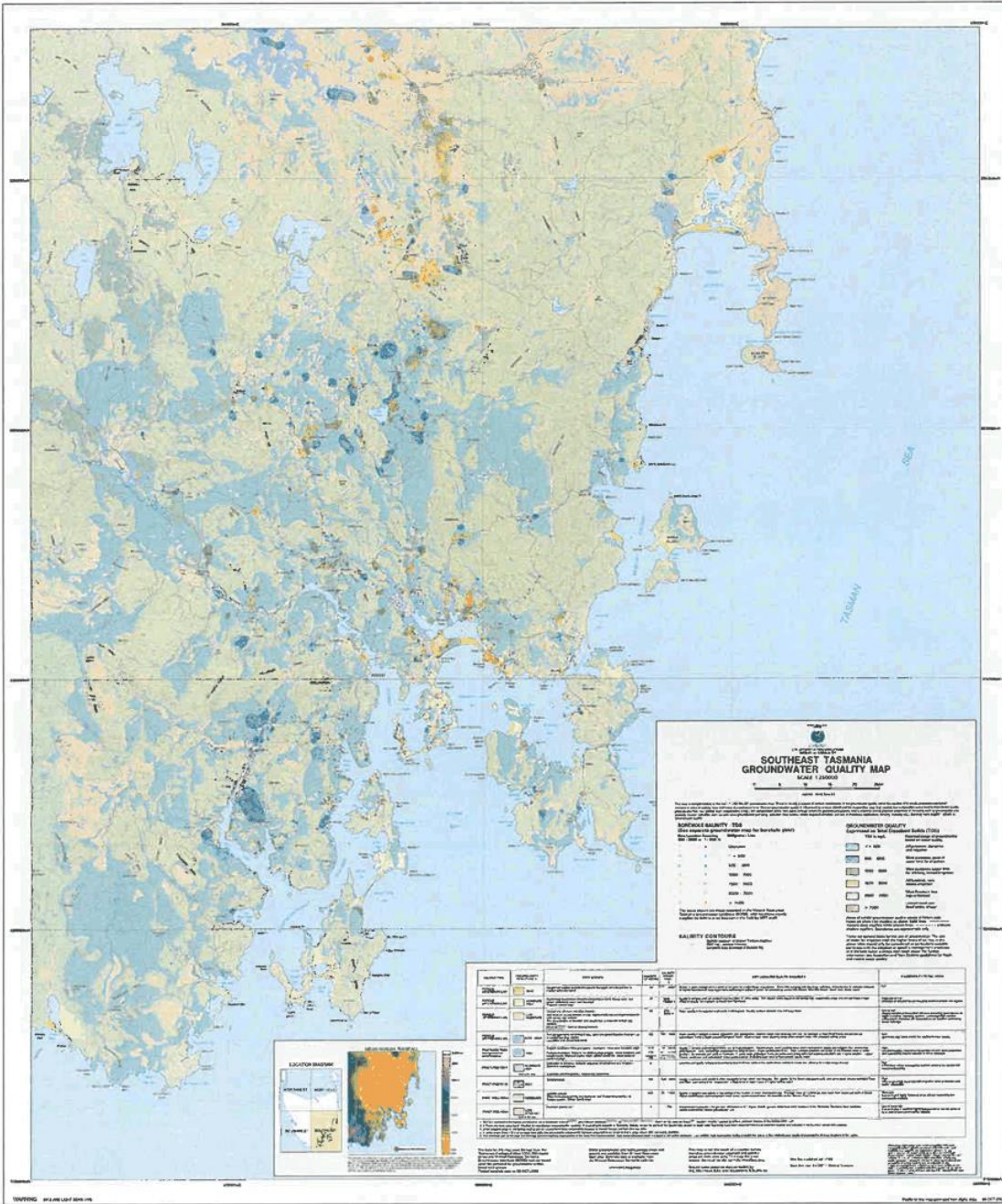




Appendix B: Hydrological Map

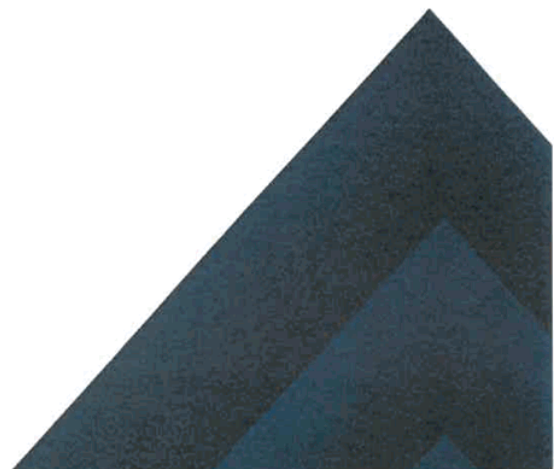


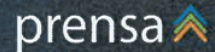






Appendix C: Adopted Soil Investigation Levels, Screening Levels and Criteria





Environmental Value of Land – Maintenance of Ecosystems

NEPM 2013 – Ecological Investigation Levels / Ecological Screening Levels

The NEPM 2013 provides Ecological Investigation Levels (EILs) and Ecological Screening Levels (ESLs) for the protection of terrestrial ecosystems for three (3) generic land use settings, as follows:

- Areas of ecological significance (i.e. national parks, state parks, wilderness areas and designated conservation areas);
- Urban residential and public open space; and
- Commercial and industrial land uses.

EILs/ESLs are the concentrations of contaminants above which further appropriate investigation and evaluation will be required. EILs are derived based on specific soil physicochemical properties and land use scenarios and generally apply to the top 2.0 m of soil profile. The NEPM 2013 provides a framework for deriving site-specific EILs for arsenic, dichlorodiphenyltrichloroethane (DDT), naphthalene, lead, copper, nickel and zinc using the National Environment Protection Council's (NEPC) *Ecological Investigation Level Calculation Spreadsheet, 2010*.

ESLs are applicable for petroleum hydrocarbons including various TRH fractions, BTEX and benzo(a)pyrene. Prensa have derived an appropriate ESL for the Site based on the soil texture identified during intrusive works (i.e. fine).

Adopted Guideline Values

For the purpose of this assessment, the following EILs and ESLs were be adopted, based on the commercial/industrial nature of the property in which the Investigation Area is located within:

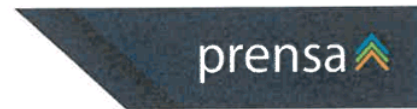
- NEPM 2013 EILs for the protection of terrestrial ecosystems in a commercial/industrial land use setting;
- NEPM 2013 ESLs for the protection of terrestrial ecosystems in a commercial/industrial land use setting; and
- CCME SQG for commercial/industrial, land use setting.

Environmental Value of Land – Human Health

NEPM 2013 - Health Investigation Levels / Health Screening Levels

The NEPM 2013 provides HILs have been developed for a broad range of inorganic and organic substances. The HILs are applicable for assessing human health risk via relevant pathways of exposure. The HILs are generic to all soil types and apply generally to a depth of 3.0 m below the surface for residential use. Site-specific conditions should determine the depth to which HILs apply for other land uses. Investigation level values are provided for four (4) generic land use settings as follows:

- **HIL 'A':** Residential with garden/accessible soil (home-grown produce <10% fruit and vegetable intake (no poultry), also includes childcare day care centres, preschools and primary schools;
- **HIL 'B':** Residential with minimal opportunities for soil access; includes dwellings with fully and permanently paved yard space such as high-rise buildings and apartments;
- **HIL 'C':** Public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths. This does not include undeveloped public open space (such as urban bushland and reserves) which should be subject to a site-specific assessment where appropriate; and
- **HIL 'D':** Commercial/Industrial includes premises such as shops, offices, factories and industrial sites.



HSLs have been developed for petroleum compounds and fractions and are applicable to assessing human health risk via the vapour inhalation pathway. The HSLs depend on specific soil physicochemical properties, land use scenarios, and the characteristics of building structures. They apply to different soil types and depths extending from the ground surface to < 4 mBGL.

CRC CARE 2011 - Health Screening Levels

The CRC Care Technical Report No. 10, *Health Screening Levels for Petroleum Hydrocarbons in Soil and Groundwater*, 2011 (CRC 2011) provides the framework for the conduct of petroleum vapour intrusion assessments resulting from contamination of soil and/or groundwater by petroleum hydrocarbons.

The NEPM 2013 HSLs for vapour intrusion were derived from this document. Prensa have also considered the HSLs prescribed in the CRC 2011 for assessing risks from petroleum hydrocarbons through the dermal contact exposure pathway. Based on the ongoing use of the Investigation Area and larger Site as sensitive land use and the protection of construction/maintenance workers performing intrusive works at the Site, the application of HSL 'D' were adopted for consideration of direct contact with soil.

NEPM 2013 - Management Limits

In addition to the application of the HSLs and ESLs, the NEPM 2013 also provides Management Limits for TRH fractions (F1 to F4), which are used to consider the physical and aesthetic risks of light non-aqueous phase liquid (LNAPL) resulting from effects of petroleum hydrocarbons. Application of the Management Limits requires consideration of site-specific factors, such as depth of building basements, services and/or groundwater. Specifically, the management limits are intended to be used as a screening value to assess the likelihood of concentrations of contaminants resulting in:

- Formation of observable light non-aqueous phase liquids (LNAPL);
- Fire and explosive hazards; and
- Effects on buried infrastructure e.g. penetration of, or damage to, in-ground services by hydrocarbons.

Therefore, the management limits are adopted, in part, to evaluate risks to human health.

Adopted Guideline Values

For the purpose of this assessment, the following HILs and HSLs are proposed to be adopted, based on the ongoing commercial/industrial land use:

- NEPM 2013 HIL 'D' to assess whether contamination may be present that may pose a health risk to human receptors based on the ongoing use of the Site and Investigation Area as a commercial/industrial land use; and
- NEPM 2013 HSL 'D' to assess whether petroleum hydrocarbon contamination may be present that may pose a risk to human receptor through the vapour inhalation exposure pathway for the ongoing use of the Site and Investigation Area as a commercial/industrial land use;
- CRC CARE HSL 'D' to assess whether petroleum hydrocarbon contamination may be present that may pose a risk to human receptor through the dermal contact exposure pathway in light of the ongoing use of the Site and Investigation Areas as a commercial/industrial land use; and
- NEPM 2013 Management Limits for a commercial/industrial land use setting to assess for the potential generation of LNAPL and the associated potential health effects.



Environmental Value of Land – Aesthetics

The NEPM 2013 states that '*aesthetic issues generally relate to the presence of low-concern or non-hazardous inert foreign material (refuse) in soil or fill resulting from human activity*' and whilst '*there are no specific numeric aesthetic guidelines, however site assessment requires balanced consideration of the quantity, type and distribution of foreign material or odours in relation to the specific land use and its sensitivity*'. Therefore, this environmental value has therefore been primarily evaluated with field observations recorded during the works. Consideration has been given to the following condition of soil to assess risks to this beneficial use:

- Discolouration and staining;
- Offensive odours; and
- Presence of wastes (i.e. metals, plastics, building debris, etc.).

The NEPM 2013 Management Limits discussed above also provide a quantitative investigation level for evaluation the potential for LNAPL generation which may impact upon aesthetics. Therefore, the Management Limits have also been adopted, in part, to evaluate risks to this beneficial use.

Environmental Value – Buildings & Structures

Australian Standard 2159 *Piling – Design and Installation* (AS2159, 2009) was considered in assessing this Environmental Value. The standard provides the following screening tool to assess corrosion potential on concrete and steel piles.

Exposure Classification for Concrete Piles					
Sulfates (SO ₄) (ppm)		pH	Chloride (ppm) Groundwater	Exposure Classification	
Soil	Groundwater			Condition A ⁽¹⁾	Condition B ⁽²⁾
<5000	<1,000	>5.5	<6,000	Mild	Non-Aggressive
5,000-10,000	1,000-3,000	4.5-5.5	6,000-12,000	Moderate	Mild
10,000-20,000	3,000-10,000	4-4.5	12,000-30,000	Severe	Moderate
>20,000	>10,000	<4	>30,000	Very Severe	Severe

⁽¹⁾ High permeability soils (e.g., sands and gravels) which are in groundwater

⁽²⁾ Low permeability soils (e.g., silts and clays) or all soils above groundwater

Exposure Classification for Steel Piles					
pH	Chlorides (ppm)		Resistivity (ohm.cm)	Exposure Classification	
	Soil	Groundwater		Condition A ⁽¹⁾	Condition B ⁽²⁾
>5.5	<5,000	<1,000	>5,000	Non-Aggressive	Non-Aggressive
4-5	5,000-20,000	1,000-10,000	2,000-5,000	Mild	Non-Aggressive
3-4	20,000-50,000	10,000-20,000	1,000-2,000	Moderate	Mild
<3	>50,000	>20,000	<1,000	Severe	Moderate

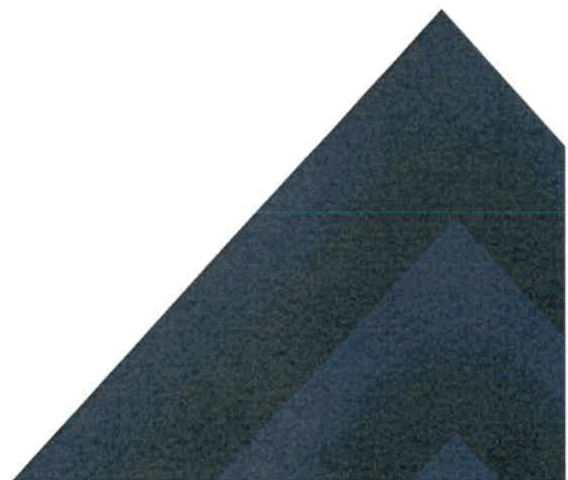
⁽¹⁾ High permeability soils (e.g., sands and gravels) which are in groundwater

⁽²⁾ Low permeability soils (e.g., silts and clays) or all soils above groundwater

The NEPM 2013 Management Limits discussed above also provide a quantitative investigation level for evaluation the potential for LNAPL generation which may impact upon buried infrastructure. Therefore, the Management Limits have also been adopted, in part, to evaluate risks to this Environmental Value



Appendix D: EIL Derivation Spreadsheets



Inputs
Select contaminant from list below Cr III
Below needed to calculate fresh and aged ACLs
Enter % clay (values from 0 to 100%) 1
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration 2.7
or for aged ABCs only
Enter State (or closest State) VIC
Enter traffic volume (high or low) high

Outputs		
Land use	Cr III soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	60	70
Urban residential and open public spaces	110	200
Commercial and industrial	160	320

Inputs	
Select contaminant from list below	
Zn	
Below needed to calculate fresh and aged ACLs	
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)	
19	
Enter soil pH (calcium chloride method) (values from 1 to 14)	
7.5	
Below needed to calculate fresh and aged ABCs	
Measured background concentration (mg/kg). Leave blank if no measured value	
or for fresh ABCs only	
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration	
0.73	
or for aged ABCs only	
Enter State (or closest State)	
VIC	
Enter traffic volume (high or low)	
high	

Outputs		
Land use	Zn soil-specific EILs	
	(mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	75	200
Urban residential and open public spaces	270	720
Commercial and industrial	420	1100

Inputs	
Select contaminant from list below	
Zn	
Below needed to calculate fresh and aged ACLs	
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)	
5.2	
Enter soil pH (calcium chloride method) (values from 1 to 14)	
6.6	
Below needed to calculate fresh and aged ABCs	
Measured background concentration (mg/kg). Leave blank if no measured value	
or for fresh ABCs only	
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration	
2.7	
or for aged ABCs only	
Enter State (or closest State)	
VIC	
Enter traffic volume (high or low)	
high	

Outputs		
Land use	Zn soil-specific EILs	
	(mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	45	110
Urban residential and open public spaces	110	290
Commercial and industrial	170	430

Inputs
Select contaminant from list below
Ni
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
19
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
0.73
or for aged ABCs only
Enter State (or closest State)
VIC
Enter traffic volume (high or low)
high

Outputs		
Land use	Ni soil-specific EILs	
	(mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	15	55
Urban residential and open public spaces	85	270
Commercial and industrial	170	450

Inputs	
Select contaminant from list below	Ni
Below needed to calculate fresh and aged ACLs	
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)	5.2
Below needed to calculate fresh and aged ABCs	
Measured background concentration (mg/kg). Leave blank if no measured value	
or for fresh ABCs only	
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration	2.7
or for aged ABCs only	
Enter State (or closest State)	VIC
Enter traffic volume (high or low)	high

Outputs		
Land use	Ni soil-specific EILs	
	(mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	15	15
Urban residential and open public spaces	25	45
Commercial and industrial	35	70

Inputs	
Select contaminant from list below	
Cu	
Below needed to calculate fresh and aged ACLs	
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)	
19	
Enter soil pH (calcium chloride method) (values from 1 to 14)	
7.5	
Enter organic carbon content (%OC) (values from 0 to 50%)	
1.1	
Below needed to calculate fresh and aged ABCs	
Measured background concentration (mg/kg). Leave blank if no measured value	
or for fresh ABCs only	
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration	
0.73	
or for aged ABCs only	
Enter State (or closest State)	
VIC	
Enter traffic volume (high or low)	
high	

Outputs		
Land use	Cu soil-specific EILs	
	(mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	55	80
Urban residential and open public spaces	110	220
Commercial and industrial	170	310

Inputs	
Select contaminant from list below	Cu
Below needed to calculate fresh and aged ACLs	
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)	5.2
Enter soil pH (calcium chloride method) (values from 1 to 14)	6.6
Enter organic carbon content (%OC) (values from 0 to 50%)	0.4
Below needed to calculate fresh and aged ABCs	
Measured background concentration (mg/kg). Leave blank if no measured value	
or for fresh ABCs only	
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration	2.7
or for aged ABCs only	
Enter State (or closest State)	VIC
Enter traffic volume (high or low)	high

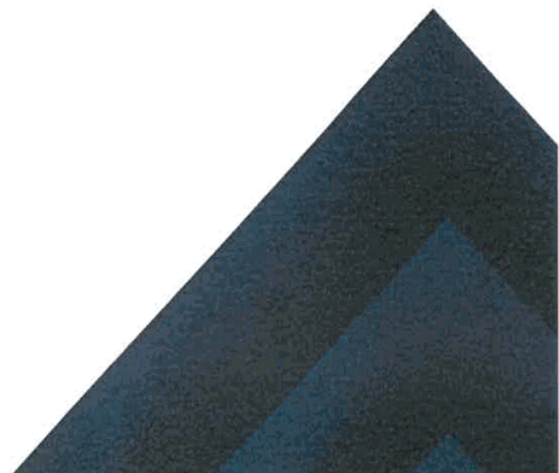
Outputs		
Land use	Cu soil-specific EILs	
	(mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	35	40
Urban residential and open public spaces	60	110
Commercial and industrial	85	150

Inputs	
Select contaminant from list below	
Cr III	
Below needed to calculate fresh and aged ACLs	
Enter % clay (values from 0 to 100%)	
10	
Below needed to calculate fresh and aged ABCs	
Measured background concentration (mg/kg). Leave blank if no measured value	
or for fresh ABCs only	
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration	
0.73	
or for aged ABCs only	
Enter State (or closest State)	
VIC	
Enter traffic volume (high or low)	
high	

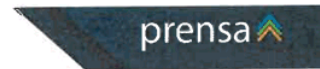
Outputs		
Land use	Cr III soil-specific EILs	
	(mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	65	140
Urban residential and open public spaces	170	410
Commercial and industrial	280	670



Appendix E: Soil Borehole Logs

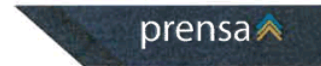




BOREHOLE LOG 01




Client: S0172			Date of Sampling: 21/09/21		Depth of Hole: 1.0	
Job Number: 98633M			Rig/Machine: N/A		Drawn By: MXP	
Site Location: 30 McRobies Road, South Hobart			Excavation Method: Hand Auger		Approved By: MJN	
Job Name: Hobart Tip Storage Shed SCA			PID Calibration: 95			
COMMENTS:						
Depth (m)	Method	Graphic Log	Subsurface Profile	Samples	PID	
0.1	HA		FILL: Clayey GRAVEL (0.0 - 0.7 m) Grey/ brown, soft, dry to slightly moist, medium plasticity, minor brick, bitumen, glass fragments, significant gravels.	BH01 0.1	0.2	
0.2						
0.3						
0.4						
0.5				BH01 0.5	0.1	
0.6						
0.7			NATURAL: Silty CLAY (0.7 - 1.0 m) Grey/ brown, soft to firm, slightly moist with medium to high plasticity, homogenous.			
0.8						
0.9						
1.0	BH01 1.0			0.2		
			End hole at 1.0 m in natural.			

Disclaimer This log is intended for environmental not geotechnical purposes.
revised by ES/ps ESdet notes 07 Oct 2021



BOREHOLE LOG 02

Client: S0172		Date of Sampling: 21/09/21		Depth of Hole: 1.0	
Job Number: 98633M		Rig/Machine: N/A		Drawn By: MXP	
Site Location: 30 McRobies Road, South Hobart		Excavation Method: Hand Auger		Approved By: MJN	
Job Name: Hobart Tip Storage Shed SCA		PID Calibration: 95			
COMMENTS: QC1 and QC2 collected at 0.1m					
Depth (m)	Method	Graphic Log	Subsurface Profile	Samples	PID
0.1	HA		FILL: Clayey GRAVEL (0.0 - 0.6 m) Grey/ brown, soft, slightly moist to moist, medium plasticity, minor brick, bitumen, glass fragments, gravels.	BH02_0.1	0.1
0.2					
0.3					
0.4					
0.5				BH02_0.5	0.1
0.6			NATURAL: Silty CLAY (0.6 - 1.0 m) Dark grey, soft to firm, slightly moist with medium to high plasticity, homogenous.		
0.7					
0.8					
0.9					
1.0					
			End hole at 1.0 m in natural.	BH02_1.0	0.2

Disclaimer This log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 07 Oct 2021

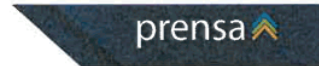


BOREHOLE LOG 03

Client: S0172		Date of Sampling: 21/09/21		Depth of Hole: 1.0	
Job Number: 98633M		Rig/Machine: N/A		Drawn By: MXP	
Site Location: 30 McRobies Road, South Hobart		Excavation Method: Hand Auger		Approved By: MJN	
Job Name: Hobart Tip Storage Shed SCA		PID Calibration: 95			
COMMENTS:					
Depth (m)	Method	Graphic Log	Subsurface Profile	Samples	PID
0.1	HA		FILL: Clayey GRAVEL (0.0 - 0.6 m) Dark grey, soft, dry to slightly moist, medium plasticity, minor brick, bitumen, glass fragments, gravels.	BH03_0.1	0.1
0.2					
0.3					
0.4					
0.5				BH03_0.5	0.1
0.6					
0.7			NATURAL: Silty CLAY (0.6 - 1.0 m) Dark grey, soft to firm, slightly moist with medium to high plasticity, homogenous.		
0.8					
0.9					
1.0	BH03_1.0			0.1	
			End hole at 1.0 m in natural.		

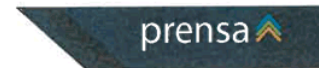
Disclaimer This log is intended for environmental not geotechnical purposes.



11/01/2022 15:53:00

BOREHOLE LOG 04

Client: S0172 Job Number: 98633M Site Location: 30 McRobies Road, South Hobart Job Name: Hobart Tip Storage Shed SCA		Date of Sampling: 21/09/21 Rig/Machine: N/A Excavation Method: Hand Auger PID Calibration: 95		Depth of Hole: 1.0 Drawn By: MXP Approved By: MJN	
COMMENTS:					
Depth (m)	Method	Graphic Log	Subsurface Profile	Samples	PID
0.1	HA		FILL: Clayey GRAVEL(0.0 - 0.6 m) Light brown, soft, dry to slightly moist, medium plasticity, minor brick, bitumen, glass fragments.	BH04_0.1	0.1
0.2					
0.3					
0.4					
0.5					
0.6			NATURAL: Silty CLAY (0.6 - 1.0 m) Dark grey, soft to firm, slightly moist with medium to high plasticity, homogenous.	BH04_0.5	0.2
0.7					
0.8					
0.9					
1.0					
1.0			End hole at 1.0 m in natural.	BH04_1.0	0.3

Disclaimer This log is intended for environmental not geotechnical purposes.
 produced by ESlog.ESdat.net on 07 Oct 2021

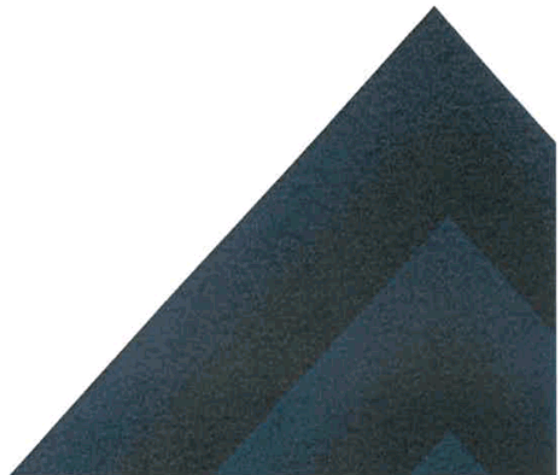
**BOREHOLE LOG 05**

Client: S0172		Date of Sampling: 21/09/21		Depth of Hole: 1.0	
Job Number: 98633M		Rig/Machine: N/A		Drawn By: MXP	
Site Location: 30 McRobies Road, South Hobart		Excavation Method: Hand Auger		Approved By: MJN	
Job Name: Hobart Tip Storage Shed SCA		PID Calibration: 95			
COMMENTS:					
Depth (m)	Method	Graphic Log	Subsurface Profile	Samples	PID
0.1	HA		FILL: Clayey GRAVEL (0.0 - 0.6 m) Dark brown, soft, dry to slightly moist, medium plasticity, minor brick, bitumen, glass fragments, significant gravels.	BH05_0.1	0.1
0.2					
0.3					
0.4					
0.5				BH05_0.5	0.1
0.6			NATURAL: Silty CLAY (0.4 - 1.0 m) Light grey, soft, slightly moist, medium to high plasticity.		
0.7					
0.8					
0.9					
1.0	BH05_1.0			0.2	
			End hole at 1.0 m in natural.		

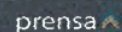
Disclaimer This log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 07 Oct 2021



Appendix F: ProUCL Statistical Calculation Table/Conversion Calculations Table



95% Upper Confidence Limit Summary



Site:	Hobart Tip Storage Shed SCA		
Project:	Hobart Tip Storage Shed Soil Contamination Assessment		
Client:	Sedgwick Claims Management	Date:	21/09/2021
Domain:	Fill	Job No:	98633M
Contaminant:	Benzo(a)pyrene	Client No:	S0172

[illegible]

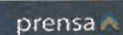
95% Upper Confidence Limit Summary



Site:	Hobart Tip Storage Shed SCA		
Project:	Hobart Tip Storage Shed Soil Contamination Assessment		
Client:	Sedgwick Claims Management	Date:	21/09/2021
Domain:	Fill	Job No:	98633M
Contaminant:	Benzo(a)pyrene	Client No:	S0172

[illegible]

95% Upper Confidence Limit Summary



Site:	Hobart Tip Storage Shed SCA		
Project:	Hobart Tip Storage Shed Soil Contamination Assessment		
Client:	Sedgwick Claims Management	Date:	21/09/2021
Domain:	Fill	Job No:	98633M
Contaminant:	Copper	Client No:	50172

[illegible]

95% Upper Confidence Limit Summary



Site:	Hobart Tip Storage Shed SCA		
Project:	Hobart Tip Storage Shed Soil Contamination Assessment		
Client:	Sedgwick Claims Management	Date:	21/09/2021
Domain:	Fill	Job No:	98633M
Contaminant:	PAHs (Sum of total)	Client No:	S0172

[illegible]

14/10/2021

Polycyclic aromatic hydrocarbons Conversion Table

For Direct Exposure Soil Cleanup Target Levels

Facility/Site Name: Hobart Tip Storage Shed SCA
 Location: McRobies Gully Waste Management Centre
30 McRobies Road, South Hobart, Tasmania

Soil Sample No. 98633M_BH1_0.5
 Sample Date 21/09/2021
 Depth (ft): Fill - 0.5 m

The TEF represents a ratio of the toxicity of a PAH congener to that of B(a)P. The use of TEFs allows the concentration of PAHs other than BaP to be converted to equipotent concentrations of B(a)P (toxic equivalent). The TEQ (toxic equivalent) is calculated by adding the product of the concentration and individual TEF values of each PAH congener. TEFs are applied to all the PAH concentrations in the sample and the sum of these is then compared with the criteria for BaP in Table 2 of IB105

In the case where a result is reported as less than limit of reporting (LOR) the LOR should be used to calculate the TEQ for that congener. For example if a sample concentration for chrysene was reported as <0.0001 mg/L, after the TEF was applied (0.01 for chrysene) the TEQ would be 0.000001 mg/L. If the sum of the TEQs for a sample exceeds the B(a)P criterion, an additional calculation may be made whereby the LORs are divided by two and the TEF applied

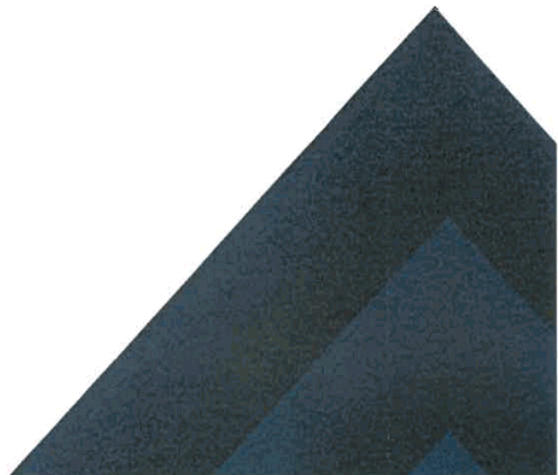
Contaminant	Concentration (mg/kg) reported	Concentration (mg/kg) - half the LOR utilised as acceptable by Information Bulletin 105	Toxic Equivalency Factor	Polycyclic aromatic hydrocarbons (total) Equivalent
Benzo(a)pyrene	0.0005	0.00025	1.00000	0.0002500
Benzo(a)anthracene	0.00001	0.00001	0.10000	0.0000005
Benzo(b)fluoranthene	0.00001	0.00001	0.10000	0.0000005
Benzo(k)fluoranthene	0.00001	0.00001	0.10000	0.0000005
Chrysene	0.00001	0.00001	0.01000	0.0000001
Benzo(ghi)perylene	0.00001	0.00001	0.01000	0.0000001
Dibenzo(a,h)anthracene	0.00001	0.00001	1.00000	0.0000005
Indeno(1,2,3-cd)pyrene	0.00001	0.00001	0.10000	0.0000005
Anthracene	0.0083	0.00830	0.01000	0.0000830
Naphthalene	0.0018	0.00180	0.00100	0.0000018
Acenaphthylene	0.0042	0.00420	0.00100	0.0000042
Acenaphthene	0.012	0.01200	0.00100	0.0000120
Fluorene	0.011	0.01100	0.00100	0.0000110
Phenanthrene	0.04	0.04000	0.00100	0.0000400
Fluoranthene	0.0051	0.00510	0.00100	0.0000051
Pyrene	0.0037	0.00370	0.00100	0.0000037

Polycyclic aromatic hydrocarbons (total) Equivalents = 0.000418

The concentration shown does not exceed the maximum (TCLP) leachable concentration outlined in Bulletin 105



Appendix G: Equipment Calibration Certificate



PID Calibration Certificate

Instrument PhoCheck Tiger
Serial No. T-113964Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments			
Battery	Charge Condition	✓				
	Fuses	✓				
	Capacity	✓				
Switch/keypad	Recharge OK?	✓				
	Operation	✓				
Display	Intensity	✓				
	Operation (segments)	✓				
Grill Filter	Condition	✓				
	Seal	✓				
Pump	Operation	✓				
	Filter	✓				
	Flow	✓				
	Valves, Diaphragm	✓				
PCB	Condition	✓				
Connectors	Condition	✓				
Sensor	PID	✓	10.6 ev			
Alarms	Beeper	✓	Low	High	TWA	STEL
	Settings	✓	50ppm	100ppm		
Software	Version	✓				
Data logger	Operation	✓				
Download	Operation	✓				
Other tests:						

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Diffusion mode Aspirated mode

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No	Instrument Reading	
PID Lamp		95ppm Isobutylene	NIST	ME846	95ppm	

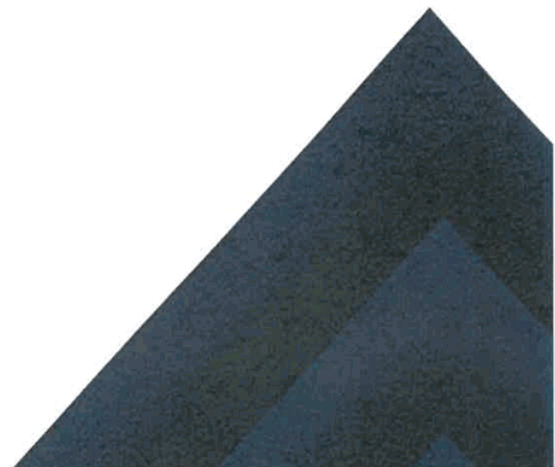
Calibrated by: Annie Williams

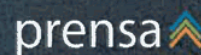
Calibration date: 15/09/2021

Next calibration due: 14/03/2022



Appendix H: Quality Assurance and Quality Control





Quality Assurance/Quality Control

Adopted Guidelines

The data quality assurance and control (QA/QC) procedures adopted by Prensa enables for an evaluation to be made regarding the useability of the data collected. Specifically, the use of the data in terms of its accuracy and reliability in forming the conclusions on the condition of the environment being investigated. The approach was generally based on guidance presented in the following documents:

- Standards Australia, Australian Standard, Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil, Part 1: Non-volatile and Semi-volatile Compounds, 2005 (AS 4482.1-2005)¹;
- Standards Australia and Standards New Zealand, Australian/New Zealand Standard, Water Quality – Sampling Part 1: Guidance on the Design of Sampling Programs, Sampling Techniques and the Preservation and Handling of Samples, 1998 (AS/NZS 5667.1-1998)²;
- Standards Australia and Standards New Zealand, Australian/New Zealand Standard, *Water Quality – Sampling Part 11: Guidance on Sampling of Groundwaters*, 1998 (AS/NZS 5667.11-1998)³;
- Victorian EPA Industrial Waste Resource Guidelines (IWRG701), *Sampling and Analysis of Waters, Wastewaters, Soils and Waste*, June 2009;
- NEPC, National Environmental Protection (Assessment of Site Contamination) Measure 1999, May 2013;
- USEPA, Guidance on Systematic Planning Using the Data Quality Objectives Process, February 2006; and
- USEPA, Guidance on Environmental Data Verification and Data Validation, January 2008.

¹ AS 4482.1-2005 is only applicable to soil assessment works.

² AS/NZS 5667.1-1998 is only applicable to water assessment works.

³ AS/NZS 5667.11-1998 is only applicable to groundwater assessment works.



Quality Assurance Procedure

The following quality assurance procedures and acceptability limits have been adopted to verify the quality of the data collected during completion of the assessment.

Data Assurance Procedure			
Quality Assurance Process	Data Quality Indicators ⁽¹⁾	Description	Acceptability Limit(s)
Sampling procedures	Precision, Comparability, Representativeness	Sampling conducted in accordance with Prensa work instructions and appropriate standards. Field forms used.	AS/NZS 5667.11-1998 AS/NZS 5667.1-1998 EPAV, Publication 669 2000 Prensa work instructions HEPA NEMP 2018
Equipment calibration	Accuracy	Field equipment calibrated in accordance with the manufactures specifications.	EPAV, Publication 669 2000 Prensa work instructions
Analytical testing methods	Accuracy, Comparability	National Association of Testing Authorities (NATA) accredited methods to be used for analysis.	NEPM 2013 Prensa work instructions
Sample preservation, handling and holding times	Accuracy, Comparability, Representativeness	Samples appropriately preserved upon collection, stored, transported and analysed under recommended conditions within holding times.	AS/NZS 5667.1-1998 IWRG701 NEPM 2013 Prensa work instructions
		Sample containers to be supplied by a NATA accredited laboratory. Appropriately preserved sampling containers to be used for the requested analysis. Samples stored and transported directly to the laboratory in chilled ice chests with completed chain of custody forms. Samples extracted and analysed within the recommended holding times specified by the NATA accredited laboratory.	

S0172:RCS-98633M Hobart Tip Storage Shed SCA



Data Assurance Procedure				
Quality Assurance Process	Data Quality Indicators ⁽¹⁾	Description	Acceptability Limit(s)	Reference(s)
Data management and reporting	Accuracy	Potential for transcription errors.	Entry of field data is to be peer reviewed during an internal technical review of report and appendices.	Prensa work instructions.
			Laboratory data requested in database format from the laboratory. Database files exported to create summary tables. At least 10% of data in the tables checked for inconsistencies.	
Data usability	Completeness	The sample volume and analytical methods enable for the limit of reporting for contaminants of concern to be less than the adopted investigation levels/criteria.	Limits of reporting less than the investigation levels/screening criteria adopted.	Prensa work instructions.

⁽¹⁾ Precision - A measure of the variability (or reproducibility) of data, Comparability - The confidence (expressed qualitatively) that data may be considered to be equivalent for each sampling and analytical event, Representativeness - The confidence (expressed qualitatively) that data is representative of each medium present on the site, Accuracy (bias) - A quantitative measure of the closeness of reported data to the true value and Completeness - A measure of the amount of usable data from a data collection activity.



Quality Control Sampling and Analysis

The following quality control sampling and analysis procedures and acceptability limits have been adopted to evaluate the validity of the analytical data.

Quality Control Sampling and Analysis Procedure				
Quality Assurance Process	Data Quality Indicators ⁽¹⁾	Description	Acceptability Limit(s)	Reference(s)
Quality control sampling and analysis frequency	Precision	Field quality control samples collected in accordance with Prensa work instructions and appropriate standards.	Blind replicate sample ≥ 1 in 20 primary samples Split sample ≥ 1 in 20 primary samples Rinsate ≥ 1 per piece of equipment per day Field blank ≥ 1 per day Trip blank ≥ 1 per ice chest containing samples to be analysed for volatile compounds	AS/NZS 5667.1-1998 AS 4482.1-2005 Prensa work instructions.
Blind Replicate and split sample analysis	Precision, Accuracy	Blind replicate sample analysis used to quantitatively assess variability in the concentrations of analytes reported from samples collected from the same location. This provides insight into the reproducibility of the lab analysis. Split sample analysis used to assess variability in the analyte concentrations reported when a sample from the same location is analysed at a different laboratory. Used to assess the accuracy of the concentrations reported by the primary laboratory.	Analysed for the same contaminants of concern as the primary sample. RPD \leq non limiting when concentrations are $<10 \times \text{LOR}$ RPD $< 30\%$ of mean concentration when $> 20 \times \text{LOR}$ RPD $< 50\%$ of mean concentration when $10 - 20 \times \text{LOR}$	AS 4482.1-2005 NATA laboratory procedures
Rinsate preparation and analysis	Accuracy, Comparability, Representativeness	Used to evaluate the potential for contamination on sampling equipment to have cross contaminated a sample. Samples prepared in the field following decontamination of sampling equipment.	Concentrations of analytes below the LOR.	AS 4482.1-2005 Prensa work instructions.

¹ RPD (relative percentage differences are calculated by dividing the difference between the primary sample and quality control sample by the average of the two, as shown below:

$$\text{RPD} = \frac{(X1 - X2)}{(X1 + X2)/2} \times 100\%$$


Where X1 = Primary sample result
X2 = Replicate sample result

S0172:RCS:98633M Hobart Tip Storage Shed SCA

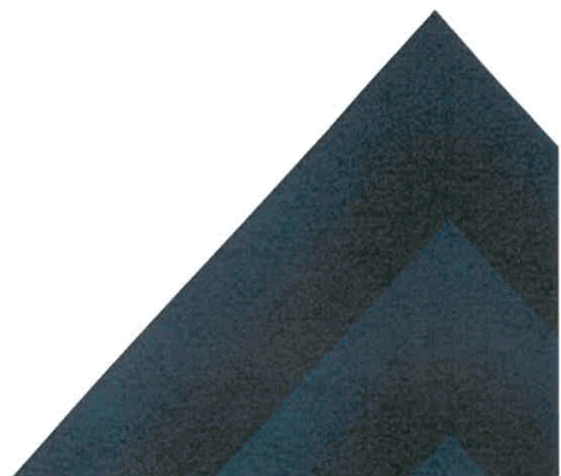


Quality Control Sampling and Analysis Procedure				
Quality Assurance Process	Data Quality Indicators ⁽¹⁾	Description	Acceptability Limit(s)	Reference(s)
Field blank preparation and analysis	Accuracy, Comparability, Representativeness	Used to evaluate the potential for contamination of a sample during the collection procedure. Samples prepared in the field.	Concentrations of analytes below the LOR.	AS/NZS 5667.1-1998 Prensa work instructions.
Trip blank preparation and analysis	Accuracy, Comparability, Representativeness	Used to evaluate cross contamination between samples in storage and transit as a product of handling. Samples prepared by the laboratory.	Concentrations of analytes below the LOR.	AS/NZS 5667.1-1998 AS 4482.1-2005 Prensa work instructions.
Laboratory quality control analysis	Precision, Accuracy	Duplicates – A second piece of analysis from the same sample and reported in the same units as the result to show comparison	RPD limits specified for blind replicate and split sample analysis.	As per blind replicate and split sample analysis.
		Spike – Addition of a known concentration of an analyte to a sample and reported as percentage recovery.	Recovery typically between 70-130% or 30-130% for phenols. Dynamic limits are typically set by the laboratory.	NATA laboratory procedures
		Method Blanks – Performed on laboratory certified sands (solids) and deionised water (water).	Concentrations below the laboratory's LOR.	NATA laboratory procedures
		Laboratory Control Samples (LCS) – Reported as percent recovery.	Recovery typically between 70-130% or 30-130% for phenols. Dynamic limits are typically set by the laboratory.	NATA laboratory procedures
		Certified Reference Material (CRM) – Use an analyte of known concentration and reported as percent recovery.	Dynamic limits are typically set by the laboratory.	NATA laboratory procedures
		Surrogates - added to all samples where appropriate and reported as a percentage recovery.	Dynamic limits are typically set by the laboratory.	NATA laboratory procedures

S0172:RCS:98633M Hobart Tip Storage Shed SCA

prensa 

Appendix I: NATA Accredited Laboratory Report & Chain of Custody Documentation





Environment Testing

Certificate of Analysis

Prensa Pty Ltd VIC
5 Burwood Rd
Hawthorn
VIC 3122



NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition
Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: Ruchurne Smith

Report 826851-S
Project name McRobies Gully Waste Management Center
Project ID 98633M
Received Date Sep 23, 2021

Client Sample ID			98633M_BH1_0.1	98633M_BH1_0.5	98633M_BH2_0.1	98633M_BH2_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46939	M21-Se46940	M21-Se46941	M21-Se46942
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	170	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	140	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	310	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	280	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	280	< 100	< 100
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	65	66	60	83
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound)*	0.5	mg/kg	< 0.5	5.2	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound)*	0.5	mg/kg	0.6	5.2	0.6	0.6
Benzo(a)pyrene TEQ (upper bound)*	0.5	mg/kg	1.2	5.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	0.8	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	1.5	< 0.5	< 0.5
Benzo(a)anthracene	0.5	mg/kg	< 0.5	3.1	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	3.4	< 0.5	< 0.5
Benzo(b&k)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	1.8	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	2.8	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	2.9	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	3.0	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	0.7	< 0.5	< 0.5



Environment Testing

Client Sample ID			98633M_BH1_0.1	98633M_BH1_0.5	98633M_BH2_0.1	98633M_BH2_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46939	M21-Se46940	M21-Se46941	M21-Se46942
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Fluoranthene	0.5	mg/kg	< 0.5	12	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	1.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	3.0	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	6.8	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	11	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	54.8	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	126	84	74	74
p-Terphenyl-d14 (surr.)	1	%	145	80	76	76
Heavy Metals						
Arsenic	2	mg/kg	< 2	2.4	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	10	12	< 5	13
Copper	5	mg/kg	63	47	56	63
Lead	5	mg/kg	16	43	85	6.0
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	23	25	12	21
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	39	75	19	31
% Moisture	1	%	13	18	7.0	17

Client Sample ID			98633M_BH2_1.0	98633M_BH3_0.1	98633M_BH3_0.5	98633M_BH4_0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46943	M21-Se46944	M21-Se46945	M21-Se46946
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	120	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	95	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	215	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	200	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	200	< 100	< 100



Environment Testing

Client Sample ID			98633M_BH2_1.0	98633M_BH3_0.1	98633M_BH3_0.5	98633M_BH4_0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46943	M21-Se46944	M21-Se46945	M21-Se46946
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	89	86	85	83
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	4.4	1.1	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	4.6	1.4	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	4.9	1.6	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	0.5	1.2	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	2.1	0.7	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	3.6	0.8	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	1.5	0.9	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	2.4	0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	1.7	0.7	< 0.5
Chrysene	0.5	mg/kg	< 0.5	2.1	1.1	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	5.9	1.7	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	2.2	0.6	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	2.0	0.9	< 0.5
Pyrene	0.5	mg/kg	< 0.5	6.2	2.0	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	30.2	11.1	< 0.5
2-Fluorobiphenyl (surr.)	1	%	74	93	67	110
p-Terphenyl-d14 (surr.)	1	%	76	91	121	147
Heavy Metals						
Arsenic	2	mg/kg	2.5	2.2	4.3	2.6
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	13	9.0	17	18
Copper	5	mg/kg	51	47	39	41
Iron	20	mg/kg	27000	-	-	-
Lead	5	mg/kg	7.9	43	68	19
Mercury	0.1	mg/kg	< 0.1	< 0.1	0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	19	15	18	18
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	33	45	68	63
% Moisture	1	%	21	21	22	21
% Clay	1	%	10	-	-	-
Chloride	5	mg/kg	41	-	-	-
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	58	-	-	-



Environment Testing

Client Sample ID			98633M_BH2_1.0	98633M_BH3_0.1	98633M_BH3_0.5	98633M_BH4_0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46943	M21-Se46944	M21-Se46945	M21-Se46946
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
pH (units) (1:5 soil:CaCl2 extract at 25°C as rec.)	0.1	pH Units	7.5	-	-	-
Sulphate (as SO4)	30	mg/kg	< 30	-	-	-
Total Organic Carbon	0.1	%	1.1	-	-	-
Heavy Metals						
Iron (%)	0.01	%	2.7	-	-	-
Cation Exchange Capacity						
Cation Exchange Capacity	0.05	meq/100g	19	-	-	-

Client Sample ID			98633M_BH4_0.5	98633M_BH4_1.0	98633M_BH5_0.1	98633M_BH5_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46947	M21-Se46948	M21-Se46949	M21-Se46950
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	61
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	60
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	121
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	100
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	98	90	-	84
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	2.1
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	2.3
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	2.6
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.1
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.7
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.8
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.9
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.9



Environment Testing

Client Sample ID			98633M_BH4_0.5	98633M_BH4_1.0	98633M_BH5_0.1	98633M_BH5_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46947	M21-Se46948	M21-Se46949	M21-Se46950
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.9
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	3.4
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.7
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.8
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	3.3
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	14.5
2-Fluorobiphenyl (surr.)	1	%	122	111	120	148
p-Terphenyl-d14 (surr.)	1	%	133	150	129	116
Heavy Metals						
Arsenic	2	mg/kg	2.7	3.1	< 2	4.4
Barium	10	mg/kg	-	-	< 10	-
Beryllium	2	mg/kg	-	-	< 2	-
Boron	10	mg/kg	-	-	< 10	-
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	14	15	< 5	56
Cobalt	5	mg/kg	-	-	5.2	-
Copper	5	mg/kg	51	< 5	52	110
Iron	20	mg/kg	-	-	7300	-
Lead	5	mg/kg	38	8.2	< 5	54
Manganese	5	mg/kg	-	-	65	-
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.2
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	21	< 5	11	18
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	75	19	10	90
Other Parameters						
% Moisture	1	%	28	20	9.2	19
% Clay	1	%	-	-	< 1	-
Chloride	5	mg/kg	-	-	< 5	-
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	-	-	37	-
pH (units)(1:5 soil:CaCl2 extract at 25°C as rec.)	0.1	pH Units	-	-	6.6	-
Sulphate (as SO4)	30	mg/kg	-	-	< 30	-
Total Organic Carbon	0.1	%	-	-	0.4	-
Chromium (hexavalent)	1	mg/kg	-	-	< 1	-
Cyanide (total)	5	mg/kg	-	-	< 5	-
Fluoride (Total)	100	mg/kg	-	-	< 100	-
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	-	-	7.2	-
Heavy Metals						
Iron (%)	0.01	%	-	-	0.73	-
Cation Exchange Capacity						
Cation Exchange Capacity	0.05	meq/100g	-	-	5.2	-
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	-	-	< 0.5	-



Environment Testing

Client Sample ID			98633M_BH4_0.5	98633M_BH4_1.0	98633M_BH5_0.1	98633M_BH5_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46947	M21-Se46948	M21-Se46949	M21-Se46950
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	-	-	< 0.5	-
1.2.4-Trichlorobenzene	0.5	mg/kg	-	-	< 0.5	-
1.1-Dichloroethene	0.5	mg/kg	-	-	< 0.5	-
1.1.1-Trichloroethane	0.5	mg/kg	-	-	< 0.5	-
1.1.1.2-Tetrachloroethane	0.5	mg/kg	-	-	< 0.5	-
1.1.2-Trichloroethane	0.5	mg/kg	-	-	< 0.5	-
1.1.2.2-Tetrachloroethane	0.5	mg/kg	-	-	< 0.5	-
1.2-Dibromoethane	0.5	mg/kg	-	-	< 0.5	-
1.2-Dichlorobenzene	0.5	mg/kg	-	-	< 0.5	-
1.2-Dichloroethane	0.5	mg/kg	-	-	< 0.5	-
1.2-Dichloropropane	0.5	mg/kg	-	-	< 0.5	-
1.2.3-Trichloropropane	0.5	mg/kg	-	-	< 0.5	-
1.2.4-Trimethylbenzene	0.5	mg/kg	-	-	< 0.5	-
1.3-Dichlorobenzene	0.5	mg/kg	-	-	< 0.5	-
1.3-Dichloropropane	0.5	mg/kg	-	-	< 0.5	-
1.3.5-Trimethylbenzene	0.5	mg/kg	-	-	< 0.5	-
1.4-Dichlorobenzene	0.5	mg/kg	-	-	< 0.5	-
2-Butanone (MEK)	0.5	mg/kg	-	-	< 0.5	-
2-Propanone (Acetone)	0.5	mg/kg	-	-	< 0.5	-
4-Chlorotoluene	0.5	mg/kg	-	-	< 0.5	-
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	-	-	< 0.5	-
Allyl chloride	0.5	mg/kg	-	-	< 0.5	-
Benzene	0.1	mg/kg	-	-	< 0.1	-
Bromobenzene	0.5	mg/kg	-	-	< 0.5	-
Bromochloromethane	0.5	mg/kg	-	-	< 0.5	-
Bromodichloromethane	0.5	mg/kg	-	-	< 0.5	-
Bromoform	0.5	mg/kg	-	-	< 0.5	-
Bromomethane	0.5	mg/kg	-	-	< 0.5	-
Carbon disulfide	0.5	mg/kg	-	-	< 0.5	-
Carbon Tetrachloride	0.5	mg/kg	-	-	< 0.5	-
Chlorobenzene	0.5	mg/kg	-	-	< 0.5	-
Chloroethane	0.5	mg/kg	-	-	< 0.5	-
Chloroform	0.5	mg/kg	-	-	< 0.5	-
Chloromethane	0.5	mg/kg	-	-	< 0.5	-
cis-1.2-Dichloroethene	0.5	mg/kg	-	-	< 0.5	-
cis-1.3-Dichloropropene	0.5	mg/kg	-	-	< 0.5	-
Dibromochloromethane	0.5	mg/kg	-	-	< 0.5	-
Dibromomethane	0.5	mg/kg	-	-	< 0.5	-
Dichlorodifluoromethane	0.5	mg/kg	-	-	< 0.5	-
Ethylbenzene	0.1	mg/kg	-	-	< 0.1	-
Iodomethane	0.5	mg/kg	-	-	< 0.5	-
Isopropyl benzene (Cumene)	0.5	mg/kg	-	-	< 0.5	-
m&p-Xylenes	0.2	mg/kg	-	-	< 0.2	-
Methylene Chloride	0.5	mg/kg	-	-	< 0.5	-
o-Xylene	0.1	mg/kg	-	-	< 0.1	-
Styrene	0.5	mg/kg	-	-	< 0.5	-
Tetrachloroethene	0.5	mg/kg	-	-	< 0.5	-
Toluene	0.1	mg/kg	-	-	< 0.1	-
trans-1.2-Dichloroethene	0.5	mg/kg	-	-	< 0.5	-



Environment Testing

Client Sample ID			98633M_BH4_0.5	98633M_BH4_1.0	98633M_BH5_0.1	98633M_BH5_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46947	M21-Se46948	M21-Se46949	M21-Se46950
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Volatile Organics						
trans-1,3-Dichloropropene	0.5	mg/kg	-	-	< 0.5	-
Trichloroethene	0.5	mg/kg	-	-	< 0.5	-
Trichlorofluoromethane	0.5	mg/kg	-	-	< 0.5	-
Vinyl chloride	0.5	mg/kg	-	-	< 0.5	-
Xylenes - Total*	0.3	mg/kg	-	-	< 0.3	-
Total MAH*	0.5	mg/kg	-	-	< 0.5	-
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	-	-	< 0.5	-
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	-	-	< 0.5	-
4-Bromofluorobenzene (surr.)	1	%	-	-	54	-
Toluene-d8 (surr.)	1	%	-	-	57	-
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	-	< 0.1	-
4,4'-DDD	0.05	mg/kg	-	-	< 0.05	-
4,4'-DDE	0.05	mg/kg	-	-	< 0.05	-
4,4'-DDT	0.05	mg/kg	-	-	< 0.05	-
a-HCH	0.05	mg/kg	-	-	< 0.05	-
Aldrin	0.05	mg/kg	-	-	< 0.05	-
b-HCH	0.05	mg/kg	-	-	< 0.05	-
d-HCH	0.05	mg/kg	-	-	< 0.05	-
Dieldrin	0.05	mg/kg	-	-	< 0.05	-
Endosulfan I	0.05	mg/kg	-	-	< 0.05	-
Endosulfan II	0.05	mg/kg	-	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	-	-	< 0.05	-
Endrin	0.05	mg/kg	-	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	-	-	< 0.05	-
Endrin ketone	0.05	mg/kg	-	-	< 0.05	-
g-HCH (Lindane)	0.05	mg/kg	-	-	< 0.05	-
Heptachlor	0.05	mg/kg	-	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	-	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	-	-	< 0.05	-
Methoxychlor	0.05	mg/kg	-	-	< 0.05	-
Toxaphene	0.5	mg/kg	-	-	< 0.5	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	-	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	-	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	-	< 0.1	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	-	< 0.1	-
Dibutylchlorobenzene (surr.)	1	%	-	-	73	-
Tetrachloro-m-xylene (surr.)	1	%	-	-	137	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	-	< 0.2	-
Bolstar	0.2	mg/kg	-	-	< 0.2	-
Chlorfenvinphos	0.2	mg/kg	-	-	< 0.2	-
Chlorpyrifos	0.2	mg/kg	-	-	< 0.2	-
Chlorpyrifos-methyl	0.2	mg/kg	-	-	< 0.2	-
Coumaphos	2	mg/kg	-	-	< 2	-
Demeton-S	0.2	mg/kg	-	-	< 0.2	-
Demeton-O	0.2	mg/kg	-	-	< 0.2	-
Diazinon	0.2	mg/kg	-	-	< 0.2	-
Dichlorvos	0.2	mg/kg	-	-	< 0.2	-



Environment Testing

Client Sample ID			98633M_BH4_0.5	98633M_BH4_1.0	98633M_BH5_0.1	98633M_BH5_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46947	M21-Se46948	M21-Se46949	M21-Se46950
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Dimethoate	0.2	mg/kg	-	-	< 0.2	-
Disulfoton	0.2	mg/kg	-	-	< 0.2	-
EPN	0.2	mg/kg	-	-	< 0.2	-
Ethion	0.2	mg/kg	-	-	< 0.2	-
Ethoprop	0.2	mg/kg	-	-	< 0.2	-
Ethyl parathion	0.2	mg/kg	-	-	< 0.2	-
Fenitrothion	0.2	mg/kg	-	-	< 0.2	-
Fensulfothion	0.2	mg/kg	-	-	< 0.2	-
Fenthion	0.2	mg/kg	-	-	< 0.2	-
Malathion	0.2	mg/kg	-	-	< 0.2	-
Merphos	0.2	mg/kg	-	-	< 0.2	-
Methyl parathion	0.2	mg/kg	-	-	< 0.2	-
Mevinphos	0.2	mg/kg	-	-	< 0.2	-
Monocrotophos	2	mg/kg	-	-	< 2	-
Naled	0.2	mg/kg	-	-	< 0.2	-
Omethoate	2	mg/kg	-	-	< 2	-
Phorate	0.2	mg/kg	-	-	< 0.2	-
Pirimiphos-methyl	0.2	mg/kg	-	-	< 0.2	-
Pyrazophos	0.2	mg/kg	-	-	< 0.2	-
Ronnel	0.2	mg/kg	-	-	< 0.2	-
Terbufos	0.2	mg/kg	-	-	< 0.2	-
Tetrachlorvinphos	0.2	mg/kg	-	-	< 0.2	-
Tokuthion	0.2	mg/kg	-	-	< 0.2	-
Trichloronate	0.2	mg/kg	-	-	< 0.2	-
Triphenylphosphate (surr.)	1	%	-	-	105	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	-	< 0.1	-
Aroclor-1221	0.1	mg/kg	-	-	< 0.1	-
Aroclor-1232	0.1	mg/kg	-	-	< 0.1	-
Aroclor-1242	0.1	mg/kg	-	-	< 0.1	-
Aroclor-1248	0.1	mg/kg	-	-	< 0.1	-
Aroclor-1254	0.1	mg/kg	-	-	< 0.1	-
Aroclor-1260	0.1	mg/kg	-	-	< 0.1	-
Total PCB*	0.1	mg/kg	-	-	< 0.1	-
Dibutylchlorodate (surr.)	1	%	-	-	73	-
Tetrachloro-m-xylene (surr.)	1	%	-	-	137	-
Acid Herbicides						
2,4-D	0.5	mg/kg	-	-	< 0.5	-
2,4-DB	0.5	mg/kg	-	-	< 0.5	-
2,4,5-T	0.5	mg/kg	-	-	< 0.5	-
2,4,5-TP	0.5	mg/kg	-	-	< 0.5	-
Actril (loxylin)	0.5	mg/kg	-	-	< 0.5	-
Dicamba	0.5	mg/kg	-	-	< 0.5	-
Dichlorprop	0.5	mg/kg	-	-	< 0.5	-
Dinitro-o-cresol	0.5	mg/kg	-	-	< 0.5	-
Dinoseb	0.5	mg/kg	-	-	< 0.5	-
MCPA	0.5	mg/kg	-	-	< 0.5	-
MCPB	0.5	mg/kg	-	-	< 0.5	-
Mecoprop	0.5	mg/kg	-	-	< 0.5	-
Warfarin (surr.)	1	%	-	-	86	-



Environment Testing

Client Sample ID			98633M_BH4_0.5	98633M_BH4_1.0	98633M_BH5_0.1	98633M_BH5_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Se46947	M21-Se46948	M21-Se46949	M21-Se46950
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	-	< 0.5	-
2,4-Dichlorophenol	0.5	mg/kg	-	-	< 0.5	-
2,4,5-Trichlorophenol	1	mg/kg	-	-	< 1	-
2,4,6-Trichlorophenol	1	mg/kg	-	-	< 1	-
2,6-Dichlorophenol	0.5	mg/kg	-	-	< 0.5	-
4-Chloro-3-methylphenol	1	mg/kg	-	-	< 1	-
Pentachlorophenol	1	mg/kg	-	-	< 1	-
Tetrachlorophenols - Total	10	mg/kg	-	-	< 10	-
Total Halogenated Phenol*	1	mg/kg	-	-	< 1	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	-	-	< 20	-
2-Methyl-4,6-dinitrophenol	5	mg/kg	-	-	< 5	-
2-Nitrophenol	1.0	mg/kg	-	-	< 1	-
2,4-Dimethylphenol	0.5	mg/kg	-	-	< 0.5	-
2,4-Dinitrophenol	5	mg/kg	-	-	< 5	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	-	< 0.2	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	-	< 0.4	-
Total cresols*	0.5	mg/kg	-	-	< 0.5	-
4-Nitrophenol	5	mg/kg	-	-	< 5	-
Dinoseb	20	mg/kg	-	-	< 20	-
Phenol	0.5	mg/kg	-	-	< 0.5	-
Phenol-d6 (surr.)	1	%	-	-	119	-
Total Non-Halogenated Phenol*	20	mg/kg	-	-	< 20	-

Client Sample ID			98633M_BH5_1.0	98633M_QC1
Sample Matrix			Soil	Soil
Eurofins Sample No.			M21-Se46951	M21-Se46952
Date Sampled			Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50
Naphthalene ^{NO2}	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{NO4}	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{NO1}	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100



Environment Testing

Client Sample ID			98633M_BH5_1.0	98633M_QC1
Sample Matrix			Soil	Soil
Eurofins Sample No.			M21-Se46951	M21-Se46952
Date Sampled			Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit		
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	78	80
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&f)fluoranthene ^{NOT}	0.5	mg/kg	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	117	112
p-Terphenyl-d14 (surr.)	1	%	132	135
Heavy Metals				
Arsenic	2	mg/kg	3.0	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	14	< 5
Copper	5	mg/kg	5.0	22
Lead	5	mg/kg	7.5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5
Nickel	5	mg/kg	< 5	< 5
Selenium	2	mg/kg	< 2	< 2
Silver	2	mg/kg	< 2	< 2
Tin	10	mg/kg	< 10	< 10
Zinc	5	mg/kg	21	5.5
% Moisture	1	%	23	6.2



Environment Testing

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins Suite 7 (metals 12)			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Sep 27, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Sep 27, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Sep 27, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Sep 27, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Melbourne	Sep 27, 2021	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals IWRG 621 : Metals M12	Melbourne	Sep 27, 2021	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
VIC EPA Metals : Metals M17	Melbourne	Sep 27, 2021	180 Days
- Method: LTM-MET-3030 by ICP-OES (hydride ICP-OES for Mercury)			
Chloride	Melbourne	Sep 27, 2021	28 Days
- Method: LTM-INO-4090 Chloride by Discrete Analyser			
Sulphate (as SO ₄)	Melbourne	Sep 27, 2021	28 Days
- Method: LTM-INO-4110 Sulfate by Discrete Analyser			
Organophosphorus Pesticides	Melbourne	Sep 27, 2021	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS (USEPA 8270)			
Acid Herbicides	Melbourne	Sep 27, 2021	14 Days
- Method: LTM-ORG-2180 Phenoxy Acid Herbicides			
NEPM Screen for Soil Classification			
Heavy Metals	Melbourne	Sep 27, 2021	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Clay	Brisbane	Oct 05, 2021	14 Days
- Method: LTM-GEN-7040			
Conductivity (1:5 aqueous extract at 25°C as rec.)	Melbourne	Sep 30, 2021	7 Days
- Method: LTM-INO-4030 Conductivity			
pH (units)(1:5 soil:CaCl ₂ extract at 25°C as rec.)	Melbourne	Sep 30, 2021	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Total Organic Carbon	Melbourne	Sep 28, 2021	28 Days
- Method: LTM-INO-4060 Total Organic Carbon in water and soil			
Cation Exchange Capacity	Melbourne	Sep 28, 2021	180 Days
- Method: LTM-MET-3060 Cation Exchange Capacity by bases & Exchangeable Sodium Percentage			
% Moisture	Melbourne	Sep 23, 2021	14 Days
- Method: LTM-GEN-7080 Moisture			
Vic EPA 1828.2 Table 3 (Solids)			
Chromium (hexavalent)	Melbourne	Sep 27, 2021	28 Days
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
Cyanide (total)	Melbourne	Sep 27, 2021	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Sep 28, 2021	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Sep 27, 2021	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Volatile Organics	Melbourne	Sep 27, 2021	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Sep 27, 2021	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			



Environment Testing

Description	Testing Site	Extracted	Holding Time
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)	Melbourne	Sep 27, 2021	14 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)	Melbourne	Sep 27, 2021	28 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Sep 27, 2021	14 Days
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Sep 27, 2021	14 Days



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Environment Testing

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Company Name: Pensa Pty Ltd VIC Address: 5 Burwood Rd Hawthorn VIC 3122 Project Name: McRobies Gully Waste Management Center Project ID: 98633M	Order No.: 826851 Report #: 9508 0100 Phone: Fax:	Received: Sep 23, 2021 10:23 AM Due: Oct 1, 2021 Priority: 5 Day Contact Name: Ruchurne Smith
Eurofins Analytical Services Manager : Harry Bacalis		

Sample Detail					
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID
1	98633M_BH1_0.1	Sep 21, 2021		Soil	M21-Se46939
2	98633M_BH1_0.5	Sep 21, 2021		Soil	M21-Se46940
3	98633M_BH2_0.1	Sep 21, 2021		Soil	M21-Se46941
4	98633M_BH2_0.5	Sep 21, 2021		Soil	M21-Se46942
5	98633M_BH2_1.0	Sep 21, 2021		Soil	M21-Se46943
6	98633M_BH3	Sep 21, 2021		Soil	M21-Se46944
External Laboratory					
Eurofins Suite 7 (metals 12)					
Vic EPA 1828.2 Table 3 (Solids)					
NEPM Screen for Soil Classification					
Moisture Set					
VIC EPA Metals : Metals M17					
Acid Herbicides					
Organophosphorus Pesticides					
TRH C6-C10					
Sulphate (as SO4)					
HOLD					
Chloride					



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NATZ # 1327

Company Name: Pensa Pty Ltd VIC Address: 5 Burwood Rd Hawthorn VIC 3122 Project Name: McRobies Gully Waste Management Center Project ID: 98633M	Order No.: 826851 Report #: 9508 0100 Phone: Fax:	Received: Sep 23, 2021 10:23 AM Due: Oct 1, 2021 Priority: 5 Day Contact Name: Ruchurne Smith
Eurofins Analytical Services Manager : Harry Bacalis		

Sample Detail															
				Soil	M21-Se46945	Soil	M21-Se46946	Soil	M21-Se46947	Soil	M21-Se46948	Soil	M21-Se46949	Soil	M21-Se46950
7	98633M_BH3_	Sep 21, 2021	0.5												
8	98633M_BH4_	Sep 21, 2021	0.1												
9	98633M_BH4_	Sep 21, 2021	0.5												
10	98633M_BH4_	Sep 21, 2021	1.0												
11	98633M_BH5_	Sep 21, 2021	0.1												
12	98633M_BH5_	Sep 21, 2021	0.5												

External Laboratory															
				Soil	M21-Se46945	Soil	M21-Se46946	Soil	M21-Se46947	Soil	M21-Se46948	Soil	M21-Se46949	Soil	M21-Se46950
Eurofins Suite 7 (metals 12)															
Vic EPA 1828.2 Table 3 (Solids)															
NEPM Screen for Soil Classification															
Moisture Set															
VIC EPA Metals : Metals M17															
Acid Herbicides															
Organophosphorus Pesticides															
TRH C6-C10															
Sulphate (as SO4)															
HOLD															
Chloride															



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Environment Testing

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IANZ # 1280

Company Name: Pensa Pty Ltd VIC Address: 5 Burwood Rd Hawthorn VIC 3122 Project Name: McRobies Gully Waste Management Center Project ID: 98633M	Order No.: 826851 Report #: 9508 0100 Phone: Fax:	Received: Sep 23, 2021 10:23 AM Due: Oct 1, 2021 Priority: 5 Day Contact Name: Ruchurne Smith
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Sample Detail									
Melbourne Laboratory - NATA # 1261 Site # 1254									
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
13 98633M_BH5_1.0	Soil	M21-Se46951							
14 98633M_QC1	Soil	M21-Se46952							
15 98633M_R1	Water	M21-Se46953							
16 98633M_TB1	Water	M21-Se46954							
17 98633M_BH1_1.0	Soil	M21-Se46955							
18 98633M_BH3_1.0	Soil	M21-Se46956							
Test Counts			2	2	2	1	1	1	14



Environment Testing

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with **blue** colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (Q53001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C8-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	ug/L: micrograms per litre
ppm: Parts per million	ppb: Parts per billion	%: Percentage
org/100mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs.

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM where no positive PFAS results have been reported have been reviewed and no data was affected.

-

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Environment Testing

Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
Total Recoverable Hydrocarbons						
TRH C6-C9	mg/kg	< 20		20	Pass	
TRH C10-C14	mg/kg	< 20		20	Pass	
TRH C15-C28	mg/kg	< 50		50	Pass	
TRH C29-C36	mg/kg	< 50		50	Pass	
Naphthalene	mg/kg	< 0.5		0.5	Pass	
TRH C6-C10	mg/kg	< 20		20	Pass	
TRH >C10-C16	mg/kg	< 50		50	Pass	
TRH >C16-C34	mg/kg	< 100		100	Pass	
TRH >C34-C40	mg/kg	< 100		100	Pass	
Method Blank						
BTEX						
Benzene	mg/kg	< 0.1		0.1	Pass	
Toluene	mg/kg	< 0.1		0.1	Pass	
Ethylbenzene	mg/kg	< 0.1		0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2		0.2	Pass	
o-Xylene	mg/kg	< 0.1		0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3		0.3	Pass	
Method Blank						
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	mg/kg	< 0.5		0.5	Pass	
Acenaphthylene	mg/kg	< 0.5		0.5	Pass	
Anthracene	mg/kg	< 0.5		0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5		0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5		0.5	Pass	
Benzo(b,j)fluoranthene	mg/kg	< 0.5		0.5	Pass	
Benzo(g,h,i)perylene	mg/kg	< 0.5		0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5		0.5	Pass	
Chrysene	mg/kg	< 0.5		0.5	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.5		0.5	Pass	
Fluoranthene	mg/kg	< 0.5		0.5	Pass	
Fluorene	mg/kg	< 0.5		0.5	Pass	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.5		0.5	Pass	
Naphthalene	mg/kg	< 0.5		0.5	Pass	
Phenanthrene	mg/kg	< 0.5		0.5	Pass	
Pyrene	mg/kg	< 0.5		0.5	Pass	
Method Blank						
Heavy Metals						
Arsenic	mg/kg	< 2		2	Pass	
Barium	mg/kg	< 10		10	Pass	
Beryllium	mg/kg	< 2		2	Pass	
Boron	mg/kg	< 10		10	Pass	
Cadmium	mg/kg	< 0.4		0.4	Pass	
Chromium	mg/kg	< 5		5	Pass	
Cobalt	mg/kg	< 5		5	Pass	
Copper	mg/kg	< 5		5	Pass	
Iron	mg/kg	< 20		20	Pass	
Lead	mg/kg	< 5		5	Pass	
Manganese	mg/kg	< 5		5	Pass	
Mercury	mg/kg	< 0.1		0.1	Pass	
Molybdenum	mg/kg	< 5		5	Pass	



Environment Testing

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Nickel	mg/kg	< 5	5	Pass	
Selenium	mg/kg	< 2	2	Pass	
Silver	mg/kg	< 2	2	Pass	
Tin	mg/kg	< 10	10	Pass	
Zinc	mg/kg	< 5	5	Pass	
Method Blank					
Chloride	mg/kg	< 5	5	Pass	
Conductivity (1:5 aqueous extract at 25°C as rec.)	uS/cm	< 10	10	Pass	
Sulphate (as SO ₄)	mg/kg	< 30	30	Pass	
Total Organic Carbon	%	< 0.1	0.1	Pass	
Cyanide (total)	mg/kg	< 5	5	Pass	
Fluoride (Total)	mg/kg	< 100	100	Pass	
Method Blank					
Cation Exchange Capacity					
Cation Exchange Capacity	meq/100g	< 0.05	0.05	Pass	
Method Blank					
Volatile Organics					
Hexachlorobutadiene	mg/kg	< 0.5	0.5	Pass	
Method Blank					
Volatile Organics					
1,1-Dichloroethane	mg/kg	< 0.5	0.5	Pass	
1,2,4-Trichlorobenzene	mg/kg	< 0.5	0.5	Pass	
1,1-Dichloroethene	mg/kg	< 0.5	0.5	Pass	
1,1,1-Trichloroethane	mg/kg	< 0.5	0.5	Pass	
1,1,1,2-Tetrachloroethane	mg/kg	< 0.5	0.5	Pass	
1,1,2-Trichloroethane	mg/kg	< 0.5	0.5	Pass	
1,1,2,2-Tetrachloroethane	mg/kg	< 0.5	0.5	Pass	
1,2-Dibromoethane	mg/kg	< 0.5	0.5	Pass	
1,2-Dichlorobenzene	mg/kg	< 0.5	0.5	Pass	
1,2-Dichloroethane	mg/kg	< 0.5	0.5	Pass	
1,2-Dichloropropane	mg/kg	< 0.5	0.5	Pass	
1,2,3-Trichloropropane	mg/kg	< 0.5	0.5	Pass	
1,2,4-Trimethylbenzene	mg/kg	< 0.5	0.5	Pass	
1,3-Dichlorobenzene	mg/kg	< 0.5	0.5	Pass	
1,3-Dichloropropane	mg/kg	< 0.5	0.5	Pass	
1,3,5-Trimethylbenzene	mg/kg	< 0.5	0.5	Pass	
1,4-Dichlorobenzene	mg/kg	< 0.5	0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5	0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5	0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5	0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5	0.5	Pass	
Allyl chloride	mg/kg	< 0.5	0.5	Pass	
Bromobenzene	mg/kg	< 0.5	0.5	Pass	
Bromochloromethane	mg/kg	< 0.5	0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5	0.5	Pass	
Bromoform	mg/kg	< 0.5	0.5	Pass	
Bromomethane	mg/kg	< 0.5	0.5	Pass	
Carbon disulfide	mg/kg	< 0.5	0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5	0.5	Pass	
Chlorobenzene	mg/kg	< 0.5	0.5	Pass	
Chloroethane	mg/kg	< 0.5	0.5	Pass	
Chloroform	mg/kg	< 0.5	0.5	Pass	
Chloromethane	mg/kg	< 0.5	0.5	Pass	
cis-1,2-Dichloroethene	mg/kg	< 0.5	0.5	Pass	



Environment Testing

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
cis-1,3-Dichloropropene	mg/kg	< 0.5	0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5	0.5	Pass	
Dibromomethane	mg/kg	< 0.5	0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5	0.5	Pass	
Iodomethane	mg/kg	< 0.5	0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5	0.5	Pass	
Methylene Chloride	mg/kg	< 0.5	0.5	Pass	
Styrene	mg/kg	< 0.5	0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5	0.5	Pass	
trans-1,2-Dichloroethene	mg/kg	< 0.5	0.5	Pass	
trans-1,3-Dichloropropene	mg/kg	< 0.5	0.5	Pass	
Trichloroethene	mg/kg	< 0.5	0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5	0.5	Pass	
Vinyl chloride	mg/kg	< 0.5	0.5	Pass	
Method Blank					
Organochlorine Pesticides					
Chlordanes - Total	mg/kg	< 0.1	0.1	Pass	
4,4'-DDD	mg/kg	< 0.05	0.05	Pass	
4,4'-DDE	mg/kg	< 0.05	0.05	Pass	
4,4'-DDT	mg/kg	< 0.05	0.05	Pass	
a-HCH	mg/kg	< 0.05	0.05	Pass	
Aldrin	mg/kg	< 0.05	0.05	Pass	
b-HCH	mg/kg	< 0.05	0.05	Pass	
d-HCH	mg/kg	< 0.05	0.05	Pass	
Dieldrin	mg/kg	< 0.05	0.05	Pass	
Endosulfan I	mg/kg	< 0.05	0.05	Pass	
Endosulfan II	mg/kg	< 0.05	0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05	0.05	Pass	
Endrin	mg/kg	< 0.05	0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05	0.05	Pass	
Endrin ketone	mg/kg	< 0.05	0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05	0.05	Pass	
Heptachlor	mg/kg	< 0.05	0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05	0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05	0.05	Pass	
Methoxychlor	mg/kg	< 0.05	0.05	Pass	
Toxaphene	mg/kg	< 0.5	0.5	Pass	
Method Blank					
Organophosphorus Pesticides					
Azinphos-methyl	mg/kg	< 0.2	0.2	Pass	
Bolstar	mg/kg	< 0.2	0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2	0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2	0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2	0.2	Pass	
Coumaphos	mg/kg	< 2	2	Pass	
Demeton-S	mg/kg	< 0.2	0.2	Pass	
Demeton-O	mg/kg	< 0.2	0.2	Pass	
Diazinon	mg/kg	< 0.2	0.2	Pass	
Dichlorvos	mg/kg	< 0.2	0.2	Pass	
Dimethoate	mg/kg	< 0.2	0.2	Pass	
Disulfoton	mg/kg	< 0.2	0.2	Pass	
EPN	mg/kg	< 0.2	0.2	Pass	
Ethion	mg/kg	< 0.2	0.2	Pass	
Ethoprop	mg/kg	< 0.2	0.2	Pass	



Environment Testing

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Ethyl parathion	mg/kg	< 0.2		0.2	Pass	
Fenitrothion	mg/kg	< 0.2		0.2	Pass	
Fensulfothion	mg/kg	< 0.2		0.2	Pass	
Fenthion	mg/kg	< 0.2		0.2	Pass	
Malathion	mg/kg	< 0.2		0.2	Pass	
Merphos	mg/kg	< 0.2		0.2	Pass	
Methyl parathion	mg/kg	< 0.2		0.2	Pass	
Mevinphos	mg/kg	< 0.2		0.2	Pass	
Monocrotophos	mg/kg	< 2		2	Pass	
Naled	mg/kg	< 0.2		0.2	Pass	
Omethoate	mg/kg	< 2		2	Pass	
Phorate	mg/kg	< 0.2		0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2		0.2	Pass	
Pyrazophos	mg/kg	< 0.2		0.2	Pass	
Ronnel	mg/kg	< 0.2		0.2	Pass	
Terbufos	mg/kg	< 0.2		0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2		0.2	Pass	
Tokuthion	mg/kg	< 0.2		0.2	Pass	
Trichloronate	mg/kg	< 0.2		0.2	Pass	
Method Blank						
Polychlorinated Biphenyls						
Aroclor-1016	mg/kg	< 0.1		0.1	Pass	
Aroclor-1221	mg/kg	< 0.1		0.1	Pass	
Aroclor-1232	mg/kg	< 0.1		0.1	Pass	
Aroclor-1242	mg/kg	< 0.1		0.1	Pass	
Aroclor-1248	mg/kg	< 0.1		0.1	Pass	
Aroclor-1254	mg/kg	< 0.1		0.1	Pass	
Aroclor-1260	mg/kg	< 0.1		0.1	Pass	
Total PCB*	mg/kg	< 0.1		0.1	Pass	
Method Blank						
Acid Herbicides						
2,4-D	mg/kg	< 0.5		0.5	Pass	
2,4-DB	mg/kg	< 0.5		0.5	Pass	
2,4,5-T	mg/kg	< 0.5		0.5	Pass	
2,4,5-TP	mg/kg	< 0.5		0.5	Pass	
Atril (loxylin)	mg/kg	< 0.5		0.5	Pass	
Dicamba	mg/kg	< 0.5		0.5	Pass	
Dichloroprop	mg/kg	< 0.5		0.5	Pass	
Dinitro-o-cresol	mg/kg	< 0.5		0.5	Pass	
Dinoseb	mg/kg	< 0.5		0.5	Pass	
MCPA	mg/kg	< 0.5		0.5	Pass	
MCPB	mg/kg	< 0.5		0.5	Pass	
Mecoprop	mg/kg	< 0.5		0.5	Pass	
Method Blank						
Phenols (Halogenated)						
2-Chlorophenol	mg/kg	< 0.5		0.5	Pass	
2,4-Dichlorophenol	mg/kg	< 0.5		0.5	Pass	
2,4,5-Trichlorophenol	mg/kg	< 1		1	Pass	
2,4,6-Trichlorophenol	mg/kg	< 1		1	Pass	
2,6-Dichlorophenol	mg/kg	< 0.5		0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1		1	Pass	
Pentachlorophenol	mg/kg	< 1		1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10		10	Pass	
Method Blank						



Environment Testing

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Phenols (non-Halogenated)					
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	< 20	20	Pass	
2-Methyl-4,6-dinitrophenol	mg/kg	< 5	5	Pass	
2-Nitrophenol	mg/kg	< 1	1.0	Pass	
2,4-Dimethylphenol	mg/kg	< 0.5	0.5	Pass	
2,4-Dinitrophenol	mg/kg	< 5	5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2	0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4	0.4	Pass	
Total cresols*	mg/kg	< 0.5	0.5	Pass	
4-Nitrophenol	mg/kg	< 5	5	Pass	
Dinoseb	mg/kg	< 20	20	Pass	
Phenol	mg/kg	< 0.5	0.5	Pass	
LCS - % Recovery					
Total Recoverable Hydrocarbons					
TRH C6-C9	%	79	70-130	Pass	
TRH C10-C14	%	109	70-130	Pass	
Naphthalene	%	97	70-130	Pass	
TRH C6-C10	%	74	70-130	Pass	
TRH >C10-C16	%	117	70-130	Pass	
LCS - % Recovery					
BTEX					
Benzene	%	86	70-130	Pass	
Toluene	%	83	70-130	Pass	
Ethylbenzene	%	77	70-130	Pass	
m&p-Xylenes	%	77	70-130	Pass	
Xylenes - Total*	%	79	70-130	Pass	
LCS - % Recovery					
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	%	116	70-130	Pass	
Acenaphthylene	%	91	70-130	Pass	
Anthracene	%	96	70-130	Pass	
Benz(a)anthracene	%	91	70-130	Pass	
Benzo(a)pyrene	%	102	70-130	Pass	
Benzo(b,j)fluoranthene	%	126	70-130	Pass	
Benzo(g,h,i)perylene	%	91	70-130	Pass	
Benzo(k)fluoranthene	%	128	70-130	Pass	
Chrysene	%	88	70-130	Pass	
Dibenz(a,h)anthracene	%	107	70-130	Pass	
Fluoranthene	%	90	70-130	Pass	
Fluorene	%	118	70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	95	70-130	Pass	
Naphthalene	%	119	70-130	Pass	
Phenanthrene	%	88	70-130	Pass	
Pyrene	%	87	70-130	Pass	
LCS - % Recovery					
Heavy Metals					
Arsenic	%	85	80-120	Pass	
Barium	%	97	80-120	Pass	
Beryllium	%	108	80-120	Pass	
Boron	%	113	80-120	Pass	
Cadmium	%	103	80-120	Pass	
Chromium	%	90	80-120	Pass	
Cobalt	%	106	80-120	Pass	
Copper	%	94	80-120	Pass	



Environment Testing

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Iron	%	92			80-120	Pass	
Lead	%	95			80-120	Pass	
Manganese	%	103			80-120	Pass	
Mercury	%	119			80-120	Pass	
Molybdenum	%	87			80-120	Pass	
Nickel	%	90			80-120	Pass	
Selenium	%	85			80-120	Pass	
Silver	%	103			80-120	Pass	
Tin	%	83			80-120	Pass	
Zinc	%	86			80-120	Pass	
LCS - % Recovery							
Chloride	%	116			70-130	Pass	
Sulphate (as SO ₄)	%	104			70-130	Pass	
Total Organic Carbon	%	107			70-130	Pass	
Chromium (hexavalent)	%	98			70-130	Pass	
Cyanide (total)	%	124			70-130	Pass	
Fluoride (Total)	%	98			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1,1-Dichloroethene	%	112			70-130	Pass	
1,1,1-Trichloroethane	%	75			70-130	Pass	
1,2-Dichlorobenzene	%	89			70-130	Pass	
1,2-Dichloroethane	%	103			70-130	Pass	
Benzene	%	76			70-130	Pass	
Ethylbenzene	%	88			70-130	Pass	
m&p-Xylenes	%	90			70-130	Pass	
Toluene	%	71			70-130	Pass	
Trichloroethene	%	72			70-130	Pass	
Xylenes - Total*	%	89			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	115			70-130	Pass	
4,4'-DDD	%	110			70-130	Pass	
4,4'-DDE	%	103			70-130	Pass	
4,4'-DDT	%	76			70-130	Pass	
a-HCH	%	94			70-130	Pass	
Aldrin	%	115			70-130	Pass	
b-HCH	%	88			70-130	Pass	
d-HCH	%	97			70-130	Pass	
Dieldrin	%	90			70-130	Pass	
Endosulfan I	%	92			70-130	Pass	
Endosulfan II	%	104			70-130	Pass	
Endosulfan sulphate	%	78			70-130	Pass	
Endrin	%	88			70-130	Pass	
Endrin aldehyde	%	98			70-130	Pass	
Endrin ketone	%	88			70-130	Pass	
g-HCH (Lindane)	%	129			70-130	Pass	
Heptachlor	%	109			70-130	Pass	
Heptachlor epoxide	%	124			70-130	Pass	
Hexachlorobenzene	%	92			70-130	Pass	
Methoxychlor	%	82			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	103			70-130	Pass	



Environment Testing

Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Dimethoate			%	81		70-130	Pass	
Ethion			%	109		70-130	Pass	
Fenitrothion			%	105		70-130	Pass	
Methyl parathion			%	96		70-130	Pass	
Mevinphos			%	91		70-130	Pass	
LCS - % Recovery								
Polychlorinated Biphenyls								
Aroclor-1260			%	83		70-130	Pass	
LCS - % Recovery								
Acid Herbicides								
2,4-D			%	78		70-130	Pass	
2,4-DB			%	81		70-130	Pass	
2,4,5-T			%	76		70-130	Pass	
2,4,5-TP			%	81		70-130	Pass	
Atril (loxynil)			%	75		70-130	Pass	
Dicamba			%	82		70-130	Pass	
Dichloroprop			%	83		70-130	Pass	
Dinitro-o-cresol			%	79		70-130	Pass	
Dinoseb			%	82		70-130	Pass	
MCPA			%	81		70-130	Pass	
MCPB			%	79		70-130	Pass	
Mecoprop			%	78		70-130	Pass	
LCS - % Recovery								
Phenols (Halogenated)								
2-Chlorophenol			%	81		25-140	Pass	
2,4-Dichlorophenol			%	49		25-140	Pass	
2,4,5-Trichlorophenol			%	102		25-140	Pass	
2,4,6-Trichlorophenol			%	76		25-140	Pass	
2,6-Dichlorophenol			%	73		25-140	Pass	
4-Chloro-3-methylphenol			%	83		25-140	Pass	
Pentachlorophenol			%	70		25-140	Pass	
Tetrachlorophenols - Total			%	82		25-140	Pass	
LCS - % Recovery								
Phenols (non-Halogenated)								
2-Cyclohexyl-4,6-dinitrophenol			%	38		25-140	Pass	
2-Methyl-4,6-dinitrophenol			%	53		25-140	Pass	
2-Nitrophenol			%	99		25-140	Pass	
2,4-Dimethylphenol			%	84		25-140	Pass	
2,4-Dinitrophenol			%	44		25-140	Pass	
2-Methylphenol (o-Cresol)			%	70		25-140	Pass	
3&4-Methylphenol (m&p-Cresol)			%	96		25-140	Pass	
Total cresols*			%	88		25-140	Pass	
4-Nitrophenol			%	55		25-140	Pass	
Dinoseb			%	60		25-140	Pass	
Phenol			%	82		25-140	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Total Recoverable Hydrocarbons				Result 1				
TRH C6-C9	M21-Se46069	NCP	%	84		70-130	Pass	
TRH C10-C14	M21-Se57841	NCP	%	113		70-130	Pass	
Naphthalene	M21-Se42665	NCP	%	111		70-130	Pass	
TRH C6-C10	M21-Se46069	NCP	%	78		70-130	Pass	
TRH >C10-C16	M21-Se57841	NCP	%	115		70-130	Pass	
Spike - % Recovery								



Environment Testing

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
BTEX				Result 1				
Benzene	M21-Se46069	NCP	%	88		70-130	Pass	
Toluene	M21-Se46069	NCP	%	80		70-130	Pass	
Ethylbenzene	M21-Se46069	NCP	%	71		70-130	Pass	
m&p-Xylenes	M21-Se46069	NCP	%	71		70-130	Pass	
o-Xylene	M21-Se46069	NCP	%	74		70-130	Pass	
Xylenes - Total*	M21-Se46069	NCP	%	72		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons				Result 1				
Acenaphthene	M21-Se48806	NCP	%	98		70-130	Pass	
Acenaphthylene	M21-Se48806	NCP	%	111		70-130	Pass	
Anthracene	M21-Se48806	NCP	%	101		70-130	Pass	
Benz(a)anthracene	M21-Se48806	NCP	%	90		70-130	Pass	
Benzo(a)pyrene	M21-Se48806	NCP	%	89		70-130	Pass	
Benzo(b,j)fluoranthene	M21-Se48806	NCP	%	113		70-130	Pass	
Benzo(g,h,i)perylene	M21-Se48806	NCP	%	108		70-130	Pass	
Benzo(k)fluoranthene	M21-Se48806	NCP	%	115		70-130	Pass	
Chrysene	M21-Se48806	NCP	%	120		70-130	Pass	
Dibenz(a,h)anthracene	M21-Se48806	NCP	%	103		70-130	Pass	
Fluoranthene	M21-Se48806	NCP	%	118		70-130	Pass	
Fluorene	M21-Se48806	NCP	%	102		70-130	Pass	
Indeno(1,2,3-cd)pyrene	M21-Se48806	NCP	%	91		70-130	Pass	
Naphthalene	M21-Se48806	NCP	%	98		70-130	Pass	
Phenanthrene	M21-Se48806	NCP	%	103		70-130	Pass	
Pyrene	M21-Se48806	NCP	%	109		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	M21-Se45649	NCP	%	77		75-125	Pass	
Cadmium	M21-Se45649	NCP	%	100		75-125	Pass	
Chromium	M21-Se45649	NCP	%	86		75-125	Pass	
Copper	M21-Se45649	NCP	%	91		75-125	Pass	
Lead	M21-Se48808	NCP	%	80		75-125	Pass	
Mercury	M21-Se45649	NCP	%	111		75-125	Pass	
Molybdenum	M21-Se45649	NCP	%	83		75-125	Pass	
Nickel	M21-Se45649	NCP	%	80		75-125	Pass	
Selenium	M21-Se45649	NCP	%	73		75-125	Fail	Q08
Silver	M21-Se45649	NCP	%	99		75-125	Pass	
Tin	M21-Se45649	NCP	%	81		75-125	Pass	
Zinc	M21-Se45649	NCP	%	70		75-125	Fail	Q08
Spike - % Recovery								
Heavy Metals				Result 1				
Iron	M21-Se45649	NCP	%	109		75-125	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Barium	M21-Se45649	NCP	%	82		75-125	Pass	
Beryllium	M21-Se45649	NCP	%	79		75-125	Pass	
Boron	M21-Se45649	NCP	%	78		75-125	Pass	
Cobalt	M21-Se45649	NCP	%	82		75-125	Pass	
Manganese	M21-Se48808	NCP	%	95		75-125	Pass	
Spike - % Recovery								
				Result 1				
Fluoride (Total)	M21-Se48428	NCP	%	119		70-130	Pass	
Spike - % Recovery								
Volatile Organics				Result 1				



Environment Testing

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
1,1-Dichloroethene	M21-Se54958	NCP	%	77		70-130	Pass	
1,1,1-Trichloroethane	M21-Se54958	NCP	%	71		70-130	Pass	
1,2-Dichlorobenzene	M21-Se54958	NCP	%	74		70-130	Pass	
1,2-Dichloroethane	M21-Se54958	NCP	%	95		70-130	Pass	
Trichloroethene	M21-Se54958	NCP	%	75		70-130	Pass	
Spike - % Recovery								
Organochlorine Pesticides				Result 1				
Chlordanes - Total	M21-Se37273	NCP	%	94		70-130	Pass	
4,4'-DDD	M21-Se37273	NCP	%	116		70-130	Pass	
4,4'-DDE	M21-Se37273	NCP	%	111		70-130	Pass	
4,4'-DDT	M21-Se37273	NCP	%	112		70-130	Pass	
a-HCH	M21-Se37273	NCP	%	78		70-130	Pass	
Aldrin	M21-Se37273	NCP	%	93		70-130	Pass	
b-HCH	M21-Se37273	NCP	%	126		70-130	Pass	
d-HCH	M21-Se37273	NCP	%	116		70-130	Pass	
Dieldrin	M21-Se37273	NCP	%	85		70-130	Pass	
Endosulfan I	M21-Se37273	NCP	%	100		70-130	Pass	
Endosulfan II	M21-Se37273	NCP	%	109		70-130	Pass	
Endosulfan sulphate	M21-Se37273	NCP	%	83		70-130	Pass	
Endrin	M21-Se37273	NCP	%	105		70-130	Pass	
Endrin aldehyde	M21-Se37273	NCP	%	113		70-130	Pass	
Endrin ketone	M21-Se37273	NCP	%	116		70-130	Pass	
g-HCH (Lindane)	M21-Se37273	NCP	%	120		70-130	Pass	
Heptachlor	M21-Se37273	NCP	%	91		70-130	Pass	
Heptachlor epoxide	M21-Se37273	NCP	%	77		70-130	Pass	
Methoxychlor	M21-Se37273	NCP	%	78		70-130	Pass	
Spike - % Recovery								
Polychlorinated Biphenyls				Result 1				
Aroclor-1016	B21-Se49235	NCP	%	95		70-130	Pass	
Aroclor-1260	B21-Se49235	NCP	%	124		70-130	Pass	
Spike - % Recovery								
Acid Herbicides				Result 1				
2,4-D	B21-Se30432	NCP	%	73		70-130	Pass	
Acitril (loxynil)	B21-Se30432	NCP	%	97		70-130	Pass	
Dichloroprop	B21-Se30432	NCP	%	88		70-130	Pass	
MCPA	B21-Se30432	NCP	%	77		70-130	Pass	
Spike - % Recovery								
Phenols (Halogenated)				Result 1				
2-Chlorophenol	M21-Se48806	NCP	%	125		30-130	Pass	
2,4-Dichlorophenol	M21-Se48806	NCP	%	95		30-130	Pass	
2,4,5-Trichlorophenol	M21-Se48891	NCP	%	93		30-130	Pass	
2,4,6-Trichlorophenol	M21-Se48806	NCP	%	102		30-130	Pass	
2,6-Dichlorophenol	M21-Se48806	NCP	%	118		30-130	Pass	
4-Chloro-3-methylphenol	M21-Se48806	NCP	%	103		30-130	Pass	
Pentachlorophenol	M21-Se48806	NCP	%	113		30-130	Pass	
Tetrachlorophenols - Total	M21-Se48806	NCP	%	32		30-130	Pass	
Spike - % Recovery								
Phenols (non-Halogenated)				Result 1				
2-Cyclohexyl-4,6-dinitrophenol	M21-Se48806	NCP	%	68		30-130	Pass	
2-Methyl-4,6-dinitrophenol	M21-Se48806	NCP	%	100		30-130	Pass	
2-Nitrophenol	M21-Se48806	NCP	%	94		30-130	Pass	
2,4-Dimethylphenol	M21-Se48806	NCP	%	117		30-130	Pass	
2,4-Dinitrophenol	M21-Se48806	NCP	%	37		30-130	Pass	
2-Methylphenol (o-Cresol)	M21-Se48806	NCP	%	81		30-130	Pass	



Environment Testing

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
3&4-Methylphenol (m&p-Cresol)	M21-Se48806	NCP	%	74			30-130	Pass	
Total cresols*	M21-Se48806	NCP	%	76			70-130	Pass	
4-Nitrophenol	M21-Se48806	NCP	%	125			30-130	Pass	
Dinoseb	M21-Se48806	NCP	%	95			30-130	Pass	
Phenol	M21-Se48806	NCP	%	104			30-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M21-Se57839	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M21-Se57839	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M21-Se57839	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C10-C16	M21-Se57839	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M21-Se57839	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M21-Se57839	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b,j)fluoranthene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g,h,i)perylene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a,h)anthracene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M21-Se45649	NCP	mg/kg	5.4	5.3	1.0	30%	Pass	
Cadmium	M21-Se45649	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M21-Se45649	NCP	mg/kg	21	21	2.0	30%	Pass	
Copper	M21-Se45649	NCP	mg/kg	71	73	2.0	30%	Pass	
Lead	M21-Se45649	NCP	mg/kg	390	400	2.0	30%	Pass	
Mercury	M21-Se45649	NCP	mg/kg	0.1	0.1	1.0	30%	Pass	
Molybdenum	M21-Se45649	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M21-Se45649	NCP	mg/kg	27	27	1.0	30%	Pass	
Selenium	M21-Se45649	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M21-Se45649	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M21-Se45649	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M21-Se45649	NCP	mg/kg	260	270	3.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M21-Se46939	CP	%	13	9.7	28	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M21-Se46940	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Naphthalene	M21-Se46940	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M21-Se46940	CP	mg/kg	< 20	< 20	<1	30%	Pass	



Environment Testing

Duplicate				Result 1	Result 2	RPD		
BTEX								
Benzene	M21-Se46940	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	M21-Se46940	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	M21-Se46940	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	M21-Se46940	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	M21-Se46940	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total*	M21-Se46940	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Iron	M21-Se45649	NCP	mg/kg	15000	15000	2.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Conductivity (1:5 aqueous extract at 25°C as rec.)	M21-Se62028	NCP	uS/cm	120	110	9.0	30%	Pass
Total Organic Carbon	M21-Se46551	NCP	%	14	14	1.1	30%	Pass
Duplicate								
Cation Exchange Capacity				Result 1	Result 2	RPD		
Cation Exchange Capacity	M21-Se46943	CP	meq/100g	19	18	5.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Barium	M21-Se45649	NCP	mg/kg	120	120	3.0	30%	Pass
Beryllium	M21-Se45649	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Boron	M21-Se45649	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Cobalt	M21-Se45649	NCP	mg/kg	10	11	3.0	30%	Pass
Manganese	M21-Se45649	NCP	mg/kg	180	180	1.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	M21-Se46949	CP	%	9.2	11	13	30%	Pass
pH (units)(1:5 soil:CaCl2 extract at 25°C as rec.)	M21-Se55623	NCP	pH Units	8.4	8.4	pass	30%	Pass
Chromium (hexavalent)	M21-Se47916	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Cyanide (total)	M21-Se48387	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Fluoride (Total)	M21-Se47788	NCP	mg/kg	< 100	< 100	<1	30%	Pass
pH (1:5 Aqueous extract at 25°C as rec.)	M21-Se58618	NCP	pH Units	9.1	9.1	pass	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Hexachlorobutadiene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1,1-Dichloroethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2,4-Trichlorobenzene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,1-Dichloroethene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,1,1-Trichloroethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,1,1,2-Tetrachloroethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,1,2-Trichloroethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,1,2,2-Tetrachloroethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2-Dibromoethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2-Dichlorobenzene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2-Dichloroethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2-Dichloropropane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2,3-Trichloropropane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,2,4-Trimethylbenzene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,3-Dichlorobenzene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,3-Dichloropropane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1,3,5-Trimethylbenzene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass



Environment Testing

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1,4-Dichlorobenzene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Butanone (MEK)	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Propanone (Acetone)	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chlorotoluene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Allyl chloride	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromobenzene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromochloromethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon disulfide	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon Tetrachloride	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chlorobenzene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroform	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1,2-Dichloroethene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1,3-Dichloropropene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Iodomethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Methylene Chloride	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Styrene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Tetrachloroethene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1,2-Dichloroethene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1,3-Dichloropropene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichlorofluoromethane	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	M21-Se56966	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M21-Se48803	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-HCH	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-HCH	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-HCH	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	M21-Se46207	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M21-Se48803	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass



Environment Testing

Duplicate				Result 1	Result 2	RPD		
Organophosphorus Pesticides								
Azinphos-methyl	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Bolstar	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorfenvinphos	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos-methyl	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Coumaphos	M21-Se48803	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Demeton-S	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Demeton-O	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Diazinon	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dichlorvos	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dimethoate	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Disulfoton	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
EPN	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethion	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethoprop	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethyl parathion	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenitrothion	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fensulfothion	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenthion	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Malathion	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Merphos	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methyl parathion	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Mevinphos	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Monocrotophos	M21-Se48803	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Naled	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Omethoate	M21-Se48803	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Phorate	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Pirimiphos-methyl	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Pyrazophos	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ronnel	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Terbufos	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Tetrachlorvinphos	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Tokuthion	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Trichloronate	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Duplicate				Result 1	Result 2	RPD		
Polychlorinated Biphenyls								
Aroclor-1016	M21-Se48803	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M21-Se48803	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M21-Se48803	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M21-Se48803	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M21-Se48803	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M21-Se48803	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M21-Se48803	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M21-Se48803	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate				Result 1	Result 2	RPD		
Acid Herbicides								
2,4-D	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-DB	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-T	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-TP	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Actril (loxylin)	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dicamba	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorprop	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dinitro-o-cresol	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass



Environment Testing

Duplicate								
Acid Herbicides				Result 1	Result 2	RPD		
Dinoseb	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
MCPA	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
MCPB	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Mecoprop	M21-Se45655	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dichlorophenol	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-Trichlorophenol	M21-Se48803	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2,4,6-Trichlorophenol	M21-Se48803	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2,6-Dichlorophenol	M21-Se48895	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M21-Se48803	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M21-Se48803	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M21-Se48803	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4,6-dinitrophenol	M21-Se48803	NCP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4,6-dinitrophenol	M21-Se48803	NCP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M21-Se48803	NCP	mg/kg	< 1	< 1	<1	30%	Pass
2,4-Dimethylphenol	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dinitrophenol	M21-Se48803	NCP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M21-Se48803	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M21-Se48803	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Total cresols*	M21-Se48895	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Nitrophenol	M21-Se48803	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M21-Se48803	NCP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M21-Se48803	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass



Environment Testing

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within Holding Time	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QA/QC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note: These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs.
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Harry Bacalis	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Jonathon Angell	Senior Analyst-Inorganic (QLD)
Joseph Edouard	Senior Analyst-Organic (VIC)
Scott Beddoes	Senior Analyst-Inorganic (VIC)
Vivian Wang	Senior Analyst-Volatile (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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Environment Testing

Certificate of Analysis

Prensa Pty Ltd VIC
5 Burwood Rd
Hawthorn
VIC 3122



NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition
Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: Ruchurne Smith

Report 826851-W
Project name McRobies Gully Waste Management Center
Project ID 98633M
Received Date Sep 23, 2021

Client Sample ID			98633M_R1	98633M_TB1
Sample Matrix			Water	Water
Eurofins Sample No.			M21-Se46953	M21-Se46954
Date Sampled			Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons				
TRH C6-C9	0.02	mg/L	< 0.02	-
TRH C10-C14	0.05	mg/L	< 0.05	-
TRH C15-C28	0.1	mg/L	< 0.1	-
TRH C29-C36	0.1	mg/L	< 0.1	-
TRH C10-C36 (Total)	0.1	mg/L	< 0.1	-
Naphthalene ^{N02}	0.01	mg/L	< 0.01	-
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02	-
TRH >C10-C16	0.05	mg/L	< 0.05	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05	-
TRH >C16-C34	0.1	mg/L	< 0.1	-
TRH >C34-C40	0.1	mg/L	< 0.1	-
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1	-
BTEX				
Benzene	0.001	mg/L	< 0.001	-
Toluene	0.001	mg/L	< 0.001	-
Ethylbenzene	0.001	mg/L	< 0.001	-
m&p-Xylenes	0.002	mg/L	< 0.002	-
o-Xylene	0.001	mg/L	< 0.001	-
Xylenes - Total*	0.003	mg/L	< 0.003	-
4-Bromofluorobenzene (surr.)	1	%	94	-
Polycyclic Aromatic Hydrocarbons				
Acenaphthene	0.001	mg/L	< 0.001	-
Acenaphthylene	0.001	mg/L	< 0.001	-
Anthracene	0.001	mg/L	< 0.001	-
Benz(a)anthracene	0.001	mg/L	< 0.001	-
Benzo(a)pyrene	0.001	mg/L	< 0.001	-
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	-
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	-
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	-
Chrysene	0.001	mg/L	< 0.001	-
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	-
Fluoranthene	0.001	mg/L	< 0.001	-
Fluorene	0.001	mg/L	< 0.001	-
Indeno(1,2,3-cd)pyrene	0.001	mg/L	< 0.001	-



Environment Testing

Client Sample ID			98633M_R1	98633M_TB1
Sample Matrix			Water	Water
Eurofins Sample No.			M21-Se46953	M21-Se46954
Date Sampled			Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Naphthalene	0.001	mg/L	< 0.001	-
Phenanthrene	0.001	mg/L	< 0.001	-
Pyrene	0.001	mg/L	< 0.001	-
Total PAH*	0.001	mg/L	< 0.001	-
2-Fluorobiphenyl (surr.)	1	%	146	-
p-Terphenyl-d14 (surr.)	1	%	85	-
Heavy Metals				
Arsenic	0.001	mg/L	< 0.001	-
Cadmium	0.0002	mg/L	< 0.0002	-
Chromium	0.001	mg/L	< 0.001	-
Copper	0.001	mg/L	< 0.001	-
Lead	0.001	mg/L	< 0.001	-
Mercury	0.0001	mg/L	< 0.0001	-
Molybdenum	0.005	mg/L	< 0.005	-
Nickel	0.001	mg/L	< 0.001	-
Selenium	0.001	mg/L	< 0.001	-
Silver	0.005	mg/L	< 0.005	-
Tin	0.005	mg/L	< 0.005	-
Zinc	0.005	mg/L	< 0.005	-



Environment Testing

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins Suite 7 (metals 12)			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Sep 23, 2021	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Sep 23, 2021	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Sep 23, 2021	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Sep 23, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Melbourne	Sep 23, 2021	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals IWRG 621 : Metals M12	Melbourne	Sep 23, 2021	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Total Recoverable Hydrocarbons	Melbourne	Sep 23, 2021	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			



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Environment Testing

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eurofins Environment Testing NZ Limited
NZBR 9750-489456

Company Name: Pensa Pty Ltd VIC Address: 5 Burwood Rd Hawthorn VIC 3122 Project Name: McRobies Gully Waste Management Center Project ID: 98633M	Order No.: 826851 Report #: 9508 0100 Phone: Fax:	Received: Sep 23, 2021 10:23 AM Due: Oct 1, 2021 Priority: 5 Day Contact Name: Ruchurne Smith
eurofins Analytical Services Manager : Harry Bacalis		

Sample Detail														
</														



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IANZ # 1230

Company Name: Prensa Pty Ltd VIC Address: 5 Burwood Rd Hawthorn VIC 3122 Project Name: McRobies Gully Waste Management Center Project ID: 98633M	Order No.: 826851 Report #: 9508 0100 Phone: Fax:	Received: Sep 23, 2021 10:23 AM Due: Oct 1, 2021 Priority: 5 Day Contact Name: Ruchurne Smith
Eurofins Analytical Services Manager : Harry Bacalis		

Sample Detail															
				Chloride	HOLD	Sulphate (as SO4)	TRH C6-C10	Organophosphorus Pesticides	Acid Herbicides	VIC EPA Metals , Metals M17	Moisture Set	NEPM Screen for Soil Classification	Vic EPA 1828.2 Table 3 (Solids)	Eurofins Suite 7 (metals 12)	
Melbourne Laboratory - NATA # 1261 Site # 1254				X	X	X	X	X	X	X	X	X	X	X	
Sydney Laboratory - NATA # 1261 Site # 18217															
Brisbane Laboratory - NATA # 1261 Site # 20794															
Mayfield Laboratory - NATA # 1261 Site # 25079															
Perth Laboratory - NATA # 2377 Site # 2370															
External Laboratory															
0.1															
7	98633M_BH3_	Sep 21, 2021	Soil								X			X	
0.5															
8	98633M_BH4_	Sep 21, 2021	Soil								X			X	
0.1															
9	98633M_BH4_	Sep 21, 2021	Soil								X			X	
0.5															
10	98633M_BH4_	Sep 21, 2021	Soil								X			X	
1.0															
11	98633M_BH5_	Sep 21, 2021	Soil			X			X	X	X				
0.1															
12	98633M_BH5_	Sep 21, 2021	Soil								X			X	
0.5															



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NZBN: 942504624854

Company Name: Prensia Pty Ltd VIC Address: 5 Burwood Rd Hawthorn VIC 3122 Project Name: McRobies Gully Waste Management Center Project ID: 98633M	Order No.: 826851 Report #: 9508 0100 Phone: Fax:	Received: Sep 23, 2021 10:23 AM Due: Oct 1, 2021 Priority: 5 Day Contact Name: Ruchurne Smith
eurofins Analytical Services Manager : Harry Bacalis		

Sample Detail									
Eurofins Suite 7 (metals 12)									
Vic EPA 1828.2 Table 3 (Solids)									
NEPM Screen for Soil Classification									
Moisture Set									
VIC EPA Metals : Metals M17									
Acid Herbicides									
Organophosphorus Pesticides									
TRH C6-C10									
Sulphate (as SO4)									
HOLD									
Chloride									
<div> <div>Melbourne Laboratory - NATA # 1261 Site # 1254</div> <div>Sydney Laboratory - NATA # 1261 Site # 1827</div> <div>Brisbane Laboratory - NATA # 1261 Site # 20794</div> <div>Mayfield Laboratory - NATA # 1261 Site # 25079</div> <div>Perth Laboratory - NATA # 2377 Site # 2370</div> </div>									
External Laboratory									
13	98633M_BH5_1.0	Soil	M21-Se46951	Sep 21, 2021					
14	98633M_QC1	Soil	M21-Se46952	Sep 21, 2021					
15	98633M_R1	Water	M21-Se46953	Sep 21, 2021					
16	98633M_TB1	Water	M21-Se46954	Sep 21, 2021					
17	98633M_BH1_1.0	Soil	M21-Se46955	Sep 21, 2021					
18	98633M_BH3_1.0	Soil	M21-Se46956	Sep 21, 2021					
Test Counts					2	2	2	1	14



Environment Testing

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with **blue** colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram

ppm: Parts per million

org/100mL: Organisms per 100 millilitres

mg/L: milligrams per litre

ppb: Parts per billion

NTU: Nephelometric Turbidity Units

ug/L: micrograms per litre

%: Percentage

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient
WA DWER	Sum of PFBA, PFPaA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs..

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Environment Testing

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
Naphthalene	mg/L	< 0.01			0.01	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	< 0.001			0.001	Pass	
Acenaphthylene	mg/L	< 0.001			0.001	Pass	
Anthracene	mg/L	< 0.001			0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001			0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001			0.001	Pass	
Benzo(b,j)fluoranthene	mg/L	< 0.001			0.001	Pass	
Benzo(g,h,i)perylene	mg/L	< 0.001			0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001			0.001	Pass	
Chrysene	mg/L	< 0.001			0.001	Pass	
Dibenz(a,h)anthracene	mg/L	< 0.001			0.001	Pass	
Fluoranthene	mg/L	< 0.001			0.001	Pass	
Fluorene	mg/L	< 0.001			0.001	Pass	
Indeno(1,2,3-cd)pyrene	mg/L	< 0.001			0.001	Pass	
Naphthalene	mg/L	< 0.001			0.001	Pass	
Phenanthrene	mg/L	< 0.001			0.001	Pass	
Pyrene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Molybdenum	mg/L	< 0.005			0.005	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Selenium	mg/L	< 0.001			0.001	Pass	
Silver	mg/L	< 0.005			0.005	Pass	
Tin	mg/L	< 0.005			0.005	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
LCS - % Recovery							



Environment Testing

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons									
TRH C6-C9			%	95			70-130	Pass	
TRH C10-C14			%	115			70-130	Pass	
Naphthalene			%	89			70-130	Pass	
TRH C6-C10			%	94			70-130	Pass	
TRH >C10-C16			%	119			70-130	Pass	
LCS - % Recovery									
BTEX									
Benzene			%	90			70-130	Pass	
Toluene			%	85			70-130	Pass	
Ethylbenzene			%	84			70-130	Pass	
m&p-Xylenes			%	85			70-130	Pass	
Xylenes - Total*			%	85			70-130	Pass	
LCS - % Recovery									
Polycyclic Aromatic Hydrocarbons									
Acenaphthene			%	103			70-130	Pass	
Acenaphthylene			%	77			70-130	Pass	
Anthracene			%	81			70-130	Pass	
Benz(a)anthracene			%	71			70-130	Pass	
Benzo(a)pyrene			%	74			70-130	Pass	
Benzo(b&j)fluoranthene			%	73			70-130	Pass	
Benzo(g,h,i)perylene			%	72			70-130	Pass	
Benzo(k)fluoranthene			%	86			70-130	Pass	
Chrysene			%	82			70-130	Pass	
Dibenz(a,h)anthracene			%	75			70-130	Pass	
Fluoranthene			%	78			70-130	Pass	
Fluorene			%	80			70-130	Pass	
Indeno(1,2,3-cd)pyrene			%	74			70-130	Pass	
Naphthalene			%	81			70-130	Pass	
Phenanthrene			%	74			70-130	Pass	
Pyrene			%	113			70-130	Pass	
LCS - % Recovery									
Heavy Metals									
Arsenic			%	104			80-120	Pass	
Cadmium			%	103			80-120	Pass	
Chromium			%	98			80-120	Pass	
Copper			%	97			80-120	Pass	
Lead			%	113			80-120	Pass	
Mercury			%	99			80-120	Pass	
Molybdenum			%	104			80-120	Pass	
Nickel			%	100			80-120	Pass	
Selenium			%	102			80-120	Pass	
Silver			%	106			80-120	Pass	
Tin			%	110			80-120	Pass	
Zinc			%	100			80-120	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M21-Se35454	NCP	%	99			70-130	Pass	
TRH C10-C14	B21-Se42424	NCP	%	97			70-130	Pass	
Naphthalene	M21-Se35454	NCP	%	85			70-130	Pass	
TRH C6-C10	M21-Se35454	NCP	%	99			70-130	Pass	
TRH >C10-C16	B21-Se42424	NCP	%	99			70-130	Pass	
Spike - % Recovery									



Environment Testing

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
BTEX								
				Result 1				
Benzene	M21-Se35454	NCP	%	85		70-130	Pass	
Toluene	M21-Se35454	NCP	%	85		70-130	Pass	
Ethylbenzene	M21-Se35454	NCP	%	86		70-130	Pass	
m&p-Xylenes	M21-Se35454	NCP	%	87		70-130	Pass	
o-Xylene	M21-Se35454	NCP	%	87		70-130	Pass	
Xylenes - Total*	M21-Se35454	NCP	%	87		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons				Result 1				
Acenaphthene	B21-Se32725	NCP	%	89		70-130	Pass	
Acenaphthylene	B21-Se32725	NCP	%	60		70-130	Fail	Q08
Benz(a)anthracene	B21-Se32725	NCP	%	90		70-130	Pass	
Benzo(a)pyrene	B21-Se32725	NCP	%	75		70-130	Pass	
Benzo(b,j)fluoranthene	B21-Se32725	NCP	%	87		70-130	Pass	
Benzo(g,h,i)perylene	B21-Se32725	NCP	%	76		70-130	Pass	
Benzo(k)fluoranthene	B21-Se32725	NCP	%	103		70-130	Pass	
Chrysene	B21-Se32725	NCP	%	98		70-130	Pass	
Dibenz(a,h)anthracene	B21-Se32725	NCP	%	80		70-130	Pass	
Fluoranthene	B21-Se32725	NCP	%	83		70-130	Pass	
Fluorene	B21-Se32725	NCP	%	88		70-130	Pass	
Indeno(1,2,3-cd)pyrene	B21-Se32725	NCP	%	85		70-130	Pass	
Naphthalene	B21-Se32725	NCP	%	81		70-130	Pass	
Phenanthrene	B21-Se32725	NCP	%	81		70-130	Pass	
Pyrene	B21-Se32725	NCP	%	86		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	M21-Se47259	NCP	%	99		75-125	Pass	
Cadmium	M21-Se47259	NCP	%	105		75-125	Pass	
Chromium	M21-Se47259	NCP	%	94		75-125	Pass	
Copper	M21-Se47259	NCP	%	91		75-125	Pass	
Lead	M21-Se47259	NCP	%	110		75-125	Pass	
Mercury	M21-Se47259	NCP	%	114		75-125	Pass	
Molybdenum	M21-Se47259	NCP	%	103		75-125	Pass	
Nickel	M21-Se47259	NCP	%	95		75-125	Pass	
Selenium	M21-Se47259	NCP	%	94		75-125	Pass	
Silver	M21-Se47259	NCP	%	103		75-125	Pass	
Tin	M21-Se47259	NCP	%	109		75-125	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C6-C9	M21-Se40039	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass
TRH C10-C14	B21-Se42423	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass
TRH C15-C28	B21-Se42423	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass
TRH C29-C36	B21-Se42423	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass
Naphthalene	M21-Se40039	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass
TRH C6-C10	M21-Se40039	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass
TRH >C10-C16	B21-Se42423	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass
TRH >C16-C34	B21-Se42423	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass
TRH >C34-C40	B21-Se42423	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass



Environment Testing

Duplicate								
BTEX								
Benzene	M21-Se40039	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Toluene	M21-Se40039	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Ethylbenzene	M21-Se40039	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
m&p-Xylenes	M21-Se40039	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass
o-Xylene	M21-Se40039	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Xylenes - Total*	M21-Se40039	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons								
Acenaphthene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Acenaphthylene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Anthracene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benz(a)anthracene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(a)pyrene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(b&j)fluoranthene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(g,h,i)perylene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(k)fluoranthene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chrysene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dibenz(a,h)anthracene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Fluoranthene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Fluorene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Naphthalene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Phenanthrene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Pyrene	M21-Se48005	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Duplicate								
Heavy Metals								
Arsenic	M21-Se47259	NCP	mg/L	0.002	0.002	2.0	30%	Pass
Cadmium	M21-Se47259	NCP	mg/L	0.0003	0.0003	7.0	30%	Pass
Chromium	M21-Se47259	NCP	mg/L	0.008	0.008	3.0	30%	Pass
Copper	M21-Se47259	NCP	mg/L	0.071	0.069	3.0	30%	Pass
Lead	M21-Se47259	NCP	mg/L	0.015	0.015	2.0	30%	Pass
Mercury	M21-Se47259	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Molybdenum	M21-Se47259	NCP	mg/L	0.012	0.012	1.0	30%	Pass
Nickel	M21-Se47259	NCP	mg/L	0.030	0.029	1.0	30%	Pass
Selenium	M21-Se47259	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Silver	M21-Se47259	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Tin	M21-Se47259	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Zinc	M21-Se47259	NCP	mg/L	0.53	0.52	2.0	30%	Pass



Environment Testing

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within Holding Time	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QA/QC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantifying against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Harry Bacalis	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Vivian Wang	Senior Analyst-Volatile (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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Environment Testing

Certificate of Analysis

Prensa Pty Ltd VIC
5 Burwood Rd
Hawthorn
VIC 3122



NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition
Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: Ruchurne Smith

Report 831302-S
Project name MCROBIES GULLY WASTE MANAGEMENT CENTER
Project ID 98633M
Received Date Oct 12, 2021

Client Sample ID			98633M_BH1_1.0
Sample Matrix			Soil
Eurofins Sample No.			M21-Oc22523
Date Sampled			Sep 21, 2021
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	1.0
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	1.3
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.6
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	0.5
Benzo(a)pyrene	0.5	mg/kg	0.9
Benzo(b&k)fluoranthene ^{N07}	0.5	mg/kg	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	0.8
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	0.8
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	2.8
Fluorene	0.5	mg/kg	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.7
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	1.0
Pyrene	0.5	mg/kg	2.6
Total PAH*	0.5	mg/kg	10.1
2-Fluorobiphenyl (surr.)	1	%	96
p-Terphenyl-d14 (surr.)	1	%	113
% Moisture	1	%	18



Environment Testing

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description

Polycyclic Aromatic Hydrocarbons

- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water

% Moisture

- Method: LTM-GEN-7080 Moisture

Testing Site

Melbourne

Extracted

Oct 12, 2021

Holding Time

14 Days

Melbourne

Oct 12, 2021

14 Days

eurofins
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Environment Testing

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IANZ # 1327

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43 Detroit Drive
Rolliston, Christchurch 7675
Phone: 0800 856 450
IANZ # 1290

Company Name: Prensa Pty Ltd VIC
Address: 5 Burwood Rd
Hawthorn
VIC 3122
Project Name: MICROBIES GULLY WASTE MANAGEMENT CENTER
Project ID: 98633M

Order No.:
Report #: 831302
Phone: 9508 0100
Fax:

Received: Oct 12, 2021 12:09 PM
Due: Oct 12, 2021
Priority: Same day
Contact Name: Ruchume Smith

Eurofins Analytical Services Manager : Harry Bacalis

Sample Detail				
Moisture Set				
Polycyclic Aromatic Hydrocarbons				
Melbourne Laboratory - NATA # 1261 Site # 1254				
Sydney Laboratory - NATA # 1261 Site # 18217				
Brisbane Laboratory - NATA # 1261 Site # 20794				
Mayfield Laboratory - NATA # 1261 Site # 25079				
Perth Laboratory - NATA # 2377 Site # 2370				
External Laboratory				
No	Sample ID	Sample Date	Sampling Time	Matrix
1	98633M_BH1_1.0	Sep 21, 2021		Soil
LAB ID				
M21-Oct2523				
Test Counts				
1 1				



Environment Testing

Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with **blue** colour, indicates data provided by customer, that may have an impact on the results.
- This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram

ppm: Parts per million

org/100mL: Organisms per 100 millilitres

mg/L: milligrams per litre

ppb: Parts per billion

NTU: Nephelometric Turbidity Units

ug/L: micrograms per litre

%: Percentage

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs..

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Environment Testing

Quality Control Results

Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code	
Method Blank									
Polycyclic Aromatic Hydrocarbons									
Acenaphthene			mg/kg	< 0.5		0.5	Pass		
Acenaphthylene			mg/kg	< 0.5		0.5	Pass		
Anthracene			mg/kg	< 0.5		0.5	Pass		
Benz(a)anthracene			mg/kg	< 0.5		0.5	Pass		
Benzo(a)pyrene			mg/kg	< 0.5		0.5	Pass		
Benzo(b&f)fluoranthene			mg/kg	< 0.5		0.5	Pass		
Benzo(g,h,i)perylene			mg/kg	< 0.5		0.5	Pass		
Benzo(k)fluoranthene			mg/kg	< 0.5		0.5	Pass		
Chrysene			mg/kg	< 0.5		0.5	Pass		
Dibenz(a,h)anthracene			mg/kg	< 0.5		0.5	Pass		
Fluoranthene			mg/kg	< 0.5		0.5	Pass		
Fluorene			mg/kg	< 0.5		0.5	Pass		
Indeno(1,2,3-cd)pyrene			mg/kg	< 0.5		0.5	Pass		
Naphthalene			mg/kg	< 0.5		0.5	Pass		
Phenanthrene			mg/kg	< 0.5		0.5	Pass		
Pyrene			mg/kg	< 0.5		0.5	Pass		
LCS - % Recovery									
Polycyclic Aromatic Hydrocarbons									
Acenaphthene			%	84		70-130	Pass		
Acenaphthylene			%	94		70-130	Pass		
Anthracene			%	93		70-130	Pass		
Benz(a)anthracene			%	76		70-130	Pass		
Benzo(a)pyrene			%	88		70-130	Pass		
Benzo(b&f)fluoranthene			%	94		70-130	Pass		
Benzo(g,h,i)perylene			%	86		70-130	Pass		
Benzo(k)fluoranthene			%	94		70-130	Pass		
Chrysene			%	92		70-130	Pass		
Dibenz(a,h)anthracene			%	81		70-130	Pass		
Fluoranthene			%	74		70-130	Pass		
Fluorene			%	81		70-130	Pass		
Indeno(1,2,3-cd)pyrene			%	78		70-130	Pass		
Naphthalene			%	94		70-130	Pass		
Phenanthrene			%	80		70-130	Pass		
Pyrene			%	75		70-130	Pass		
Test		Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons					Result 1				
Acenaphthene		M21-Oc18953	NCP	%	73		70-130	Pass	
Acenaphthylene		M21-Oc18953	NCP	%	85		70-130	Pass	
Anthracene		M21-Oc18953	NCP	%	87		70-130	Pass	
Benz(a)anthracene		M21-Oc18953	NCP	%	99		70-130	Pass	
Benzo(a)pyrene		M21-Oc18953	NCP	%	77		70-130	Pass	
Benzo(b&f)fluoranthene		M21-Oc18953	NCP	%	74		70-130	Pass	
Benzo(g,h,i)perylene		M21-Oc18953	NCP	%	79		70-130	Pass	
Benzo(k)fluoranthene		M21-Oc18953	NCP	%	74		70-130	Pass	
Chrysene		M21-Oc18953	NCP	%	78		70-130	Pass	
Dibenz(a,h)anthracene		M21-Oc18953	NCP	%	72		70-130	Pass	
Fluoranthene		M21-Oc18953	NCP	%	97		70-130	Pass	
Fluorene		M21-Oc18953	NCP	%	74		70-130	Pass	



Environment Testing

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Indeno(1,2,3-cd)pyrene	M21-Oc18953	NCP	%	72			70-130	Pass	
Naphthalene	M21-Oc18953	NCP	%	83			70-130	Pass	
Phenanthrene	M21-Oc18953	NCP	%	71			70-130	Pass	
Pyrene	M21-Oc18953	NCP	%	97			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&f)fluoranthene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g,h,i)perylene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a,h)anthracene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M21-Oc18952	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M21-Oc22523	CP	%	18	17	3.0	30%	Pass	



Environment Testing

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

Authorised by:

Harry Bacalis
Joseph Edouard

Analytical Services Manager
Senior Analyst-Organic (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously Issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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Environment Testing

Certificate of Analysis

Prensa Pty Ltd VIC
5 Burwood Rd
Hawthorn
VIC 3122



NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 - Testing
NATA is a signatory to the ILAC Mutual Recognition
Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: Ruchurne Smith

Report 830197-L-V2
Project name McRobies Gully Waste Management Center
Project ID 98633M
Received Date Oct 07, 2021

Client Sample ID			98633M_BH1_0.5	98633M_BH3_0.1	98633M_BH3_0.5	98633M_BH5_0.5
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			M21-Oc12630	M21-Oc12631	M21-Oc12632	M21-Oc12633
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.001	mg/L	0.012	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	0.004	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	0.008	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{NO7}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	0.005	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	0.011	< 0.001	< 0.001	< 0.001
Indeno(1,2,3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Naphthalene	0.001	mg/L	0.002	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	0.040	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	0.004	< 0.001	< 0.001	< 0.001
Total PAH*	0.001	mg/L	0.086	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	58	79	58	70
p-Terphenyl-d14 (surr.)	1	%	99	106	95	65
Polycyclic Aromatic Hydrocarbons (Trace level)						
Acenaphthene	0.00001	mg/L	0.012	< 0.00001	< 0.00001	< 0.00001
Acenaphthylene	0.00001	mg/L	0.0042	< 0.00001	< 0.00001	< 0.00001
Anthracene	0.00001	mg/L	0.0083	< 0.00001	< 0.00001	< 0.00001
Benz(a)anthracene	0.00001	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Benzo(a)pyrene	0.0005	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Benzo(b&j)fluoranthene	0.00001	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Benzo(g,h,i)perylene	0.00001	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Benzo(k)fluoranthene	0.00001	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Chrysene	0.00001	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Dibenz(a,h)anthracene	0.00001	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Fluoranthene	0.00001	mg/L	0.0051	< 0.00001	< 0.00001	< 0.00001
Fluorene	0.00001	mg/L	0.011	< 0.00001	< 0.00001	< 0.00001
Indeno(1,2,3-cd)pyrene	0.00001	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Naphthalene	0.00001	mg/L	0.0018	< 0.00001	< 0.00001	< 0.00001
Phenanthrene	0.00001	mg/L	0.040	< 0.00001	< 0.00001	< 0.00001



Environment Testing

Client Sample ID			98633M_BH1_0.5	98633M_BH3_0.1	98633M_BH3_0.5	98633M_BH5_0.5
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			M21-Oc12630	M21-Oc12631	M21-Oc12632	M21-Oc12633
Date Sampled			Sep 21, 2021	Sep 21, 2021	Sep 21, 2021	Sep 21, 2021
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons (Trace level)						
Pyrene	0.00001	mg/L	0.0037	< 0.00001	< 0.00001	< 0.00001
Total PAH*	0.00001	mg/L	0.0861	< 0.0005	< 0.0005	< 0.0005
2-Fluorobiphenyl (surr.)	1	%	58	79	58	70
p-Terphenyl-d14 (surr.)	1	%	99	106	95	65
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	7.0	6.7	6.6	6.6
pH (Leachate fluid)	0.1	pH Units	5.1	5.1	5.1	5.1
pH (off)	0.1	pH Units	6.1	6.3	6.3	5.9



Environment Testing

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Polycyclic Aromatic Hydrocarbons	Melbourne	Oct 13, 2021	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Polycyclic Aromatic Hydrocarbons (Trace level)	Melbourne	Oct 13, 2021	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water (Trace)			
AUS Leaching Procedure			
pH (initial)	Melbourne	Oct 07, 2021	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Oct 07, 2021	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Oct 07, 2021	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			

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Environment Testing

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Company Name: Pensa Pty Ltd VIC
Address: 5 Burwood Rd
 Hawthorn
 VIC 3122
Project Name: McRobies Gully Waste Management Center
Project ID: 98633M

Order No.: 830197
Report #: 9508 0100
Phone:
Fax:

Received: Oct 7, 2021 1:23 PM
Due: Oct 12, 2021
Priority: 3 Day
Contact Name: Ruchurne Smith

Eurofins Analytical Services Manager : Harry Bacalis

Sample Detail					Polycyclic Aromatic Hydrocarbons (Trace level)			
Melbourne Laboratory - NATA # 1261 Site # 1254								X
Sydney Laboratory - NATA # 1261 Site # 18217								X
Brisbane Laboratory - NATA # 1261 Site # 20794								
Mayfield Laboratory - NATA # 1261 Site # 25079								
Perth Laboratory - NATA # 2377 Site # 2370								
External Laboratory					Polycyclic Aromatic Hydrocarbons			
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	98633M_BH1_0.5	Sep 21, 2021		AUS Leachate	M21-Oct12630	X	X	X
2	98633M_BH3_0.1	Sep 21, 2021		AUS Leachate	M21-Oct12631	X	X	X
3	98633M_BH3_0.5	Sep 21, 2021		AUS Leachate	M21-Oct12632	X	X	X
4	98633M_BH5_0.5	Sep 21, 2021		AUS Leachate	M21-Oct12633	X	X	X
Test Counts						4	4	4



Environment Testing

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with **blue** colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram

ppm: Parts per million

org/100mL: Organisms per 100 millilitres

mg/L: milligrams per litre

ppb: Parts per billion

NTU: Nephelometric Turbidity Units

ug/L: micrograms per litre

%: Percentage

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs..

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Environment Testing

Quality Control Results

Test	Lab Sample ID	QA Source	Units	Result 1	Result 2	RPD	Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Polycyclic Aromatic Hydrocarbons									
Acenaphthene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)anthracene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g,h,i)perylene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a,h)anthracene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	M21-Oc04264	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	



Environment Testing

Comments

V2 Amendments made to add PAH Standard Level results to all Samples

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEO) apply specifically to the total of the two co-eluting PAHs

Authorised by:

Emily Daos
Joseph Edouard

Analytical Services Manager
Senior Analyst-Organic (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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CERTIFICATE OF ANALYSIS 27875


Client Details	
Client	Prensa
Attention	Ruchurne Smith
Address	Ground level, 5 Burwood Road, PO Box 6058, Hawthorn, VIC, 3122

Sample Details	
Your Reference	98633M
Number of Samples	1 Soil
Date samples received	23/09/2021
Date completed instructions received	23/09/2021

Analysis Details	
Please refer to the following pages for results, methodology summary and quality control data.	
Samples were analysed as received from the client. Results relate specifically to the samples as received.	
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.	

Report Details	
Date results requested by	01/10/2021
Date of Issue	01/10/2021
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By
Chris De Luca, Operations Manager

Authorised By

Pamela Adams, Laboratory Manager

Envirolab Reference: 27875
Revision No: R00



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Client Reference: 98633M

vTRH(C6-C10)/BTEXN in Soil		
Our Reference		27875-1
Your Reference	UNITS	98633M_QC2
Date Sampled		21/09/2021
Type of sample		Soil
Date extracted		25/09/2021
Date analysed		25/09/2021
vTRH C ₆ - C ₁₀	mg/kg	<25
vTRH C ₆ - C ₁₀	mg/kg	<25
TRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total BTEX	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	93

Client Reference: 98633M

TRH Soil C10-C40 NEPM		
Our Reference		27875-1
Your Reference	UNITS	98633M_QC2
Date Sampled		21/09/2021
Type of sample		Soil
Date extracted	-	25/09/2021
Date analysed	-	25/09/2021
TRH C ₁₀ - C ₁₄	mg/kg	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	87

Client Reference: 98633M

PAHs in Soil		
Our Reference		27875-1
Your Reference	UNITS	98633M_QC2
Date Sampled		21/09/2021
Type of sample		Soil
Date extracted	-	25/09/2021
Date analysed	-	26/09/2021
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j&k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	<0.05
Benzo(a)pyrene TEQ calc (Zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc (Half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc (PQL)	mg/kg	<0.5
Surrogate p-Terphenyl-d ₁₄	%	102

Client Reference: 98633M

Metals in soil		
Our Reference		27875-1
Your Reference	UNITS	98633M_QC2
Date Sampled		21/09/2021
Type of sample		Soil
Date digested	-	25/09/2021
Date analysed	-	27/09/2021
Arsenic	mg/kg	<4
Cadmium	mg/kg	<0.4
Chromium	mg/kg	3
Copper	mg/kg	51
Lead	mg/kg	12
Mercury	mg/kg	<0.1
Molybdenum	mg/kg	<1
Nickel	mg/kg	11
Tin	mg/kg	<1
Selenium	mg/kg	<2
Silver	mg/kg	<1
Zinc	mg/kg	20

Client Reference: 98633M

Moisture		
Our Reference		27875-1
Your Reference	UNITS	98633M_QC2
Date Sampled		21/09/2021
Type of sample		Soil
Date prepared	-	25/09/2021
Date analysed	-	27/09/2021
Moisture	%	17

Client Reference: 98633M

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105°C for a minimum of 12 hours.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.
Org-020	<p>Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.</p> <p>F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.</p> <p>Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).</p>
Org-022	<p>Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013.</p> <p>For soil results:-</p> <ol style="list-style-type: none"> 1. 'EQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. <p>Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.</p>
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	<p>Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.</p> <p>Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.</p>

Client Reference: 98633M

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			25/09/2021					25/09/2021	
Date analysed	-			25/09/2021					25/09/2021	
vTRH C ₆ - C ₉	mg/kg	25	Org-023	<25					92	
vTRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25					92	
Benzene	mg/kg	0.2	Org-023	<0.2					96	
Toluene	mg/kg	0.5	Org-023	<0.5					95	
Ethylbenzene	mg/kg	1	Org-023	<1					85	
m+p-xylene	mg/kg	2	Org-023	<2					91	
o-Xylene	mg/kg	1	Org-023	<1					86	
Naphthalene	mg/kg	1	Org-023	<1						
Surrogate aaa-Trifluorotoluene	%		Org-023	111					100	

Client Reference: 98633M

QUALITY CONTROL: TRH Soil C10-C40 NEPM					Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1 [NT]
Date extracted	-			25/09/2021	01	0.1	0.1	0.01	25/09/2021
Date analysed	-			25/09/2021	02	0.1	0.1	0.01	25/09/2021
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	03	0.1	0.1	0.01	98
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	04	0.1	0.1	0.01	89
TRH C ₂₉ - C ₃₅	mg/kg	100	Org-020	<100	05	0.1	0.1	0.01	93
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	06	0.1	0.1	0.01	98
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	07	0.1	0.1	0.01	89
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	08	0.1	0.1	0.01	93
Surrogate o-Terphenyl	%		Org-020	93	09	0.1	0.1	0.01	99

Client Reference: 98633M

QUALITY CONTROL: PAHs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			25/09/2021					25/09/2021	
Date analysed	-			26/09/2021					26/09/2021	
Naphthalene	mg/kg	0.1	Org-022	<0.1					94	
Acenaphthylene	mg/kg	0.1	Org-022	<0.1					98	
Acenaphthene	mg/kg	0.1	Org-022	<0.1						
Fluorene	mg/kg	0.1	Org-022	<0.1					92	
Phenanthrene	mg/kg	0.1	Org-022	<0.1					94	
Anthracene	mg/kg	0.1	Org-022	<0.1						
Fluoranthene	mg/kg	0.1	Org-022	<0.1					92	
Pyrene	mg/kg	0.1	Org-022	<0.1					96	
Benzo(a)anthracene	mg/kg	0.1	Org-022	<0.1						
Chrysene	mg/kg	0.1	Org-022	<0.1					86	
Benzo(b,j&k)fluoranthene	mg/kg	0.2	Org-022	<0.2						
Benzo(a)pyrene	mg/kg	0.05	Org-022	<0.05					92	
Indeno{1,2,3-c,d}pyrene	mg/kg	0.1	Org-022	<0.1						
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022	<0.1						
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022	<0.1						
Surrogate p-Terphenyl-d ₁₄	%		Org-022	100					102	

Client Reference: 98633M

QUALITY CONTROL: Metals in soil					Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1 [NT]
Date digested	-			25/09/2021					25/09/2021
Date analysed	-			27/09/2021					27/09/2021
Arsenic	mg/kg	4	Metals-020 ICP-AES	<4					90
Cadmium	mg/kg	0.4	Metals-020 ICP-AES	<0.4					92
Chromium	mg/kg	1	Metals-020 ICP-AES	<1					89
Copper	mg/kg	1	Metals-020 ICP-AES	<1					87
Lead	mg/kg	1	Metals-020 ICP-AES	<1					86
Mercury	mg/kg	0.1	Metals-021 CV-AAS	<0.1					112
Molybdenum	mg/kg	1	Metals-020 ICP-AES	<1					91
Nickel	mg/kg	1	Metals-020 ICP-AES	<1					88
Tin	mg/kg	1	Metals-020 ICP-AES	<1					89
Selenium	mg/kg	2	Metals-020 ICP-AES	<2					86
Silver	mg/kg	1	Metals-020 ICP-AES	<1					88
Zinc	mg/kg	1	Metals-020 ICP-AES	<1					89

Client Reference: 98633M

Result Definitions	
NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Client Reference: 98633M

Quality Control Definitions	
Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria
<p>Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.</p> <p>Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.</p> <p>Spikes for Physical and Aggregate Tests are not applicable.</p> <p>For VOCs in water samples, three vials are required for duplicate or spike analysis.</p> <p>Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.</p> <p>Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.</p> <p>In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.</p> <p>When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.</p> <p>Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.</p> <p>Measurement Uncertainty estimates are available for most tests upon request.</p> <p>Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.</p> <p>Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.</p>

CHAIN OF CUSTODY RECORD
Form PC-100 (Rev. 10/2019)

Project Information
Project Name: 5th Street Bridge, Highway 132
Project Number: 02011918
Project Location: San Diego, CA

Sampling Information
Sampling Date: 1/11/2022
Sampling Time: 10:00 AM
Sampling Location: 5th Street Bridge, Highway 132

Chain of Custody

Step	Person	Date	Signature	Initials	Time	Location	Notes
1	Project Manager	1/11/2022					
2	Field Supervisor	1/11/2022					
3	Field Technician	1/11/2022					
4	Field Technician	1/11/2022					
5	Field Technician	1/11/2022					
6	Field Technician	1/11/2022					
7	Field Technician	1/11/2022					
8	Field Technician	1/11/2022					
9	Field Technician	1/11/2022					
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99	Field Technician	1/11/2022					
100	Field Technician	1/11/2022					

Summary
Total Samples: 100
Total Volume: 100 L
Total Weight: 100 g
Total Cost: 100 \$

Signatures
Project Manager: [Signature]
Field Supervisor: [Signature]
Field Technician: [Signature]

Notes
All samples were collected and analyzed successfully. No anomalies were detected.

4.4
4.4
4.4

158085

[illegible]

44
44.9

2

Mail - #AU_CAU001_EnviroSampleVic - Outlook

9/21/2021

RE: Supplies for Hobart

Harry Bacalis <HarryBacalis@eurofins.com>

Tue 21/09/2021 3:47 PM

To: Ruchurne Smith <ruchurne.smith@prensa.com.au>
 Cc: 'Madeline Park' <madeline.park@prensa.com.au>; #AU_CAU001_EnviroSampleVic <EnviroSampleVic@eurofins.com>

1 attachments (53 KB)

Prensa - McRobies Gully COC.XLSM.

Thanks Ruchurne

Canh – e-COC attached, these will be coming from Hobart overnight.

Kind regards,

Harry Bacalis

Phone: +61 3 8564 5064

Mobile: +61 438 858 924

Email : HarryBacalis@eurofins.com

From: Ruchurne Smith <ruchurne.smith@prensa.com.au>
Sent: Tuesday, 21 September 2021 3:40 PM
To: Harry Bacalis <HarryBacalis@eurofins.com>
Cc: 'Madeline Park' <madeline.park@prensa.com.au>
Subject: RE: Supplies for Hobart

EXTERNAL EMAIL *

Thanks mate, Attached

Ruchurne Smith | Senior HSE Consultant | Prensa Pty Ltd

Office: 5 Burwood Rd, Hawthorn VIC 3122

Postal Address: PO Box 6058, Hawthorn West VIC 3122

Phone: (03) 9508 0100 | Mobile: 0422161785

Email: ruchurne.smith@prensa.com.au | Web: www.prensa.com.au



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 property > environment > safety >

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From: Harry Bacalis [mailto:HarryBacalis@eurofins.com]
Sent: Tuesday, 21 September 2021 3:01 PM
To: Ruchurne Smith <ruchurne.smith@prensa.com.au>
 Cc: 'Lake Hearn' <lake.hearn@prensa.com.au>; 'Madeline Park' <madeline.park@prensa.com.au>

10/12/2021

Mail - #AU_CAU001_EnviroSampleVic - Outlook

RE: Eurofins Test Results, Invoice - Report 826851 : Site McRobies Gully Waste Management Center (98633M)

Ruchurne Smith <ruchurne.smith@prensa.com.au>

Tue 12/10/2021 12:09 PM

To: Harry Bacalis <HarryBacalis@eurofins.com>

Cc: #AU_CAU001_EnviroSampleVic <EnviroSampleVic@eurofins.com>

EXTERNAL EMAIL*

Hey mate,

Can I get sample 98633M_BH1_0.5 analysed for PAH on a same day analysis turnaround if possible please.

Cheers

Ruchurne Smith | Senior HSE Consultant | Prensa Pty Ltd

Se46955-HT609-D302-

Office: 5 Burwood Rd, Hawthorn VIC 3122

Postal Address: PO Box 6058, Hawthorn West VIC 3122

Phone: (03) 9508 0100 | Mobile: 0422161785

Email: ruchurne.smith@prensa.com.au | Web: www.prensa.com.au**prensa** 
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From: Ruchurne Smith [mailto:ruchurne.smith@prensa.com.au]**Sent:** Thursday, 7 October 2021 1:19 PM**To:** 'HarryBacalis@eurofins.com' <HarryBacalis@eurofins.com>**Cc:** '#AU_CAU001_EnviroSampleVic' <EnviroSampleVic@eurofins.com>**Subject:** RE: Eurofins Test Results, Invoice - Report 826851 : Site McRobies Gully Waste Management Center (98633M)

Hi Harry,

Can I get ASLP analysis on a 3 day TAT for the following please.

PAH - can I get the low detection limit for BaP please

98633M_BH1_0.5

98633M_BH3_0.1

98633M_BH3_0.5

98633M_BH5_0.5

Cheers

Ruchurne Smith | Senior HSE Consultant | Prensa Pty Ltd

831302

Catherine

EF

12/10 12.09
P-

10/7/2021

Mail - #AU_CAU001_EnviroSampleVic - Outlook

RE: Eurofins Test Results, Invoice - Report 826851 : Site McRobies Gully Waste Management Center (98633M)

Harry Bacalis <HarryBacalis@eurofins.com>

Thu 7/10/2021 1:23 PM

To: Ruchurne Smith <ruchurne.smith@prensa.com.au>

Cc: #AU_CAU001_EnviroSampleVic <EnviroSampleVic@eurofins.com>

Thanks Ruchurne

Can I get 3 DAY TAT - B(a)P LL

Kind regards,

Harry Bacalis

Phone: +61 3 8564 5064

Mobile: +61 438 858 924

Email : HarryBacalis@eurofins.com**From:** Ruchurne Smith <ruchurne.smith@prensa.com.au>**Sent:** Thursday, 7 October 2021 1:19 PM**To:** Harry Bacalis <HarryBacalis@eurofins.com>**Cc:** #AU_CAU001_EnviroSampleVic <EnviroSampleVic@eurofins.com>**Subject:** RE: Eurofins Test Results, Invoice - Report 826851 : Site McRobies Gully Waste Management Center (98633M)**EXTERNAL EMAIL***

Hi Harry,

Can I get ASLP analysis on a 3 day TAT for the following please.

PAH - can I get the low detection limit for BaP please

98633M_BH1_0.5

98633M_BH3_0.1

98633M_BH3_0.5

98633M_BH5_0.5

5c46939 - 971178 - FG101
5c46944 -
5c46945 -
5c46950 -

↓ ↓

Cheers

Ruchurne Smith | Senior HSE Consultant | Prensa Pty Ltd

Office: 5 Burwood Rd, Hawthorn VIC 3122

Postal Address: PO Box 6058, Hawthorn West VIC 3122

Phone: (03) 9508 0100 | Mobile: 0422161785

Email: ruchurne.smith@prensa.com.au | Web: www.prensa.com.au

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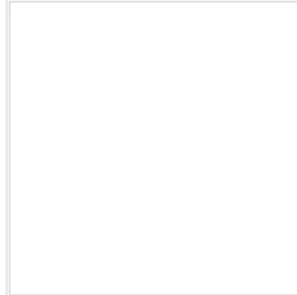
Email transmission cannot be guaranteed to be secure or error-free and e-mails may be intercepted with, may contain computer viruses or other defects and may not be successfully replicated on other

~~826851~~ 830197
t.b. L. Ryan

Planning: #237412

Property

30 MCROBIES ROAD SOUTH HOBART TAS 7004

**People**

Applicant

*

TIIFRENO BUILDERS

PO Box 302

PO Box 302

GLENORCHY TAS 7010

0402916957

admin@tiifrenobuilders.com.au

Owner

*

HOBART CITY COUNCIL

50 MACQUARIE STREET

HOBART TAS 7000

62382860

coh@hobartcity.com.au

Entered By

JOHN BROOKS

0408 122 682

admin@tiifrenobuilders.com.au

Use

Other

Details

Have you obtained pre application advice?

☒ Yes

If YES please provide the pre application advice number eg PAE-17-xx

PAE-21-176

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. If you are not the owner of the property you MUST include signed confirmation from the owner that they are aware of this application.

*

☐ No

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the number of signs under Other Details below.

*

• ☐ No

If this application is related to an enforcement action please enter Enforcement Number

Details

What is the current approved use of the land / building(s)?

*

Waste Site

Please provide a full description of the proposed use or development (i.e. demolition and new dwelling, swimming pool and garage)

*

The replacement of the bin shed will be used for the storage of recyclable materials

Estimated cost of development

*

120000.00

Existing floor area (m2)

Proposed floor area (m2)

Site area (m2)

200.00

200.00

300

Carparking on Site

N/A

Total parking spaces

Existing parking spaces

☐ Other (no selection
chosen)

50

50

Other Details

Does the application include signage?

*

No

How many signs, please enter 0 if there are none involved in this application?

*

0

Tasmania Heritage Register

Is this property on the Tasmanian Heritage Register?

• ☐ No**Documents****Required Documents**

Title (Folio text and Plan and Schedule of Easements)

*

FolioText-126957-1.pdf

Plans (proposed, existing)

*

FolioPlan-126957-1.pdf

Supporting Documents

Architectural Description

Form 35 TAS - 310725 Glen_flattened.pdf

Form 35

Form 35 TAS - 310725 Glen_flattened.pdf

**RESULT OF SEARCH**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME 126957	FOLIO 1
EDITION 2	DATE OF ISSUE 24-Jun-2015

SEARCH DATE : 21-Jul-2021

SEARCH TIME : 12.49 PM

DESCRIPTION OF LAND

City of HOBART

Lot 1 on Plan 126957

Derivation : Part of 2660 Acres Gtd to J Allport & Anor and

Part of 2000 Acres Gtd to P Degraives

Prior CT 114735/1

SCHEDULE 1

A454296 HOBART CITY COUNCIL

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

BENEFITING EASEMENT a right of carriageway over the roadway 10.

06 wide marked B.C. on Plan No. 126957

A454297 INSTRUMENT creating covenants

UNREGISTERED DEALINGS AND NOTATIONS

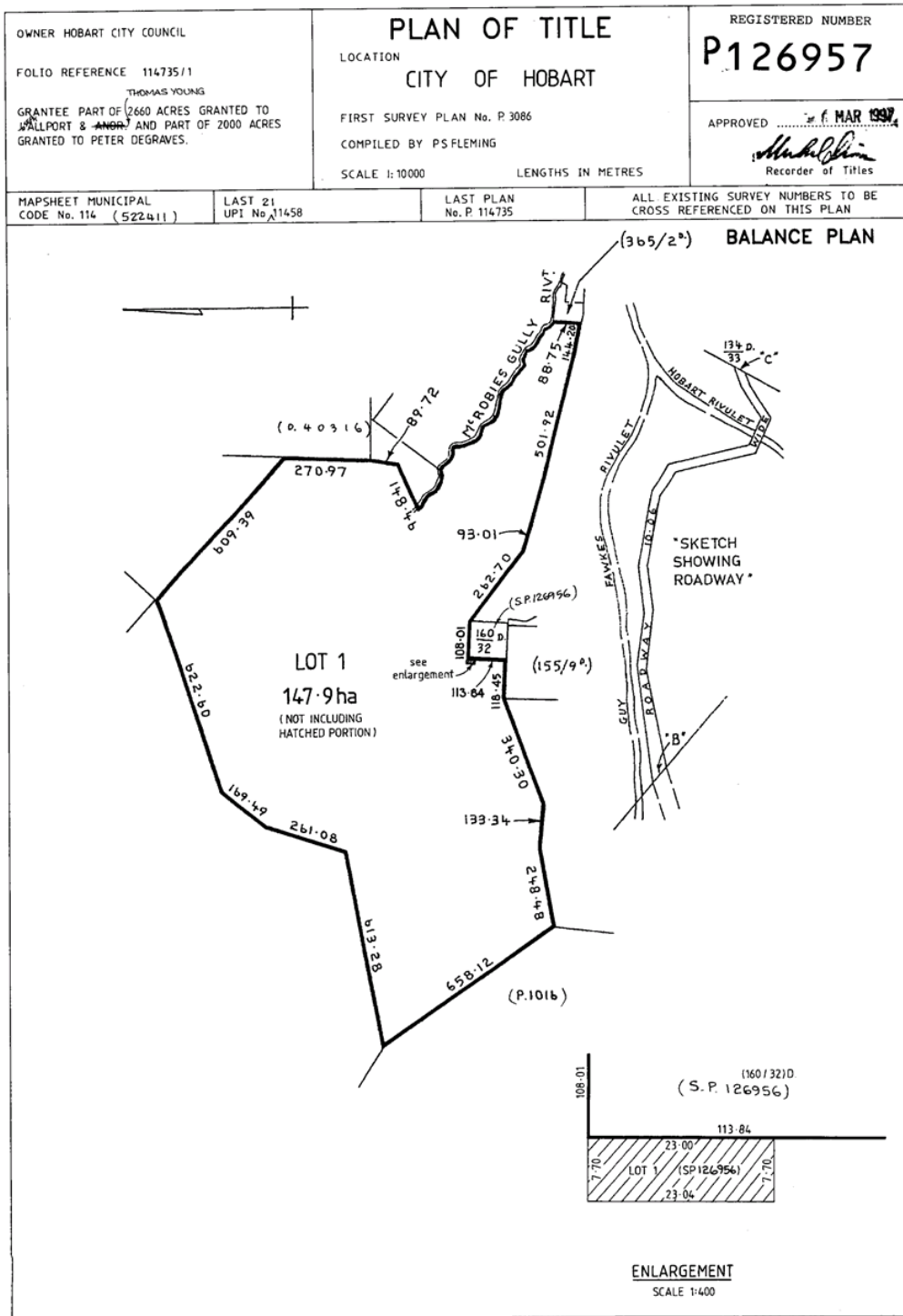
No unregistered dealings or other notations



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980





Enquiries to: City Planning
Phone: (03) 6238 2715
Email: coh@hobartcity.com.au

9 August 2021

Allison Bradburn (Tiifreno Builders)
C/- 30 McRobies Road
SOUTH HOBART TAS 7000

mailto: Admin@tiifrenobuilders.com.au

Dear Sir/Madam

**30 MCROBIES ROAD, SOUTH HOBART - WORKS ON COUNCIL LAND NOTICE OF
LAND OWNER CONSENT TO LODGE A PLANNING APPLICATION - GMC-21-48**

Site Address:

30 McRobies Road, South Hobart

Description of Proposal:

Outbuilding (Storage Shed) / Works on Council Land

Applicant Name:

Allison Bradburn
Tiifreno Builders

PLN (if applicable):

PLN-21-492

I write to advise that pursuant to Section 52 of the *Land Use Planning and Approvals Act 1993*, I grant my consent on behalf of the Hobart City Council as the owner/administrator of the above land for you to make application to the City for a planning permit for the development described above and as per the attached documents.


Please note that the granting of the consent is only for the making of the application and in no way should such consent be seen as prejudicing any decision the Council is required to make as the statutory planning authority.

Hobart Town Hall
50 Macquarie Street
Hobart TAS 7000

Hobart Council Centre
16 Elizabeth Street
Hobart TAS 7000

City of Hobart
GPO Box 503
Hobart TAS 7001

T 03 6238 2711
F 03 6234 7109
E coh@hobartcity.com.au
W hobartcity.com.au

 CityofHobartOfficial
ABN 39 055 343 428
Hobart City Council

This consent does not constitute an approval to undertake any works and does not authorise the owner, developer or their agents any right to enter or conduct works on any Council managed land whether subject to this consent or not.

If planning approval is granted by the planning authority, you will be required to seek approvals and permits from the City as both landlord, land manager, or under other statutory powers (such as other legislation or City By-Laws) that are not granted with the issue of a planning permit under a planning scheme. This includes the requirement for you to reapply for a permit to occupy a public space under the City's Public Spaces By-law if the proposal relates to such an area.

Accordingly, I encourage you to continue to engage with the City about these potential requirements.

Yours faithfully



(Kelly Grigsby)

Chief Executive Officer being the General Manager as appointed by Council pursuant to section 61 of the Local Government Act 1993 (Tas)

Relevant documents/plans:

Plans - ShedTech 310725

**CERTIFICATE OF THE RESPONSIBLE DESIGNER**

Section 94
Section 106
Section 129
Section 155

To: Owner name
 Address
 Suburb/postcode

Form **35**

Designer details:

Name: Category:
 Business name: Phone No:
 Business address:
 Fax No:
 Licence No: Email address:

Details of the proposed work:

Owner/Applicant Designer's project reference No.
 Address: Lot No:

 Type of work: Building work ☒ Plumbing work ☐ (X all applicable)

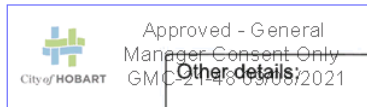
Description of work:

Building Class: 10a
New Steel Framed Portal Frame Shed

(new building / alteration /
 addition / repair / removal /
 re-erection
 water / sewerage /
 stormwater /
 on-site wastewater
 management system /
 backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions): (X all applicable certificates)

Certificate Type:	Certificate	Responsible Practitioner
	<input checked="" type="checkbox"/> Building design	Architect or Building Designer
	<input checked="" type="checkbox"/> Structural design	Engineer or Civil Designer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer or Civil Designer
	<input type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Service Designer
	<input type="checkbox"/> Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	<input type="checkbox"/> Other (specify)	
Deemed-to-Satisfy: <input type="checkbox"/>	Performance Solution: <input type="checkbox"/>	(X the appropriate box)

**Design documents provided:**

The following documents are provided with this Certificate –

Document description:

Drawing Numbers:	Prepared by:	Date:
Gable Shed		
SH2009-07	ShedTech	13/03/2018
SH2009-08	ShedTech	20/09/2012
STSD-01.2	ShedTech	10/02/2015
STSD-02	ShedTech	10/11/2017
STSD200-02	ShedTech	
STSD150-01	ShedTech	

Additional Documents (Job Reference # 310725): Wind Load Certificate (2 Pages), Compliance Statement, Building Elevations, Column and Mullion Locations, Bracing Locations, Purlin and Girts Locations, Fly Bracing Locations.

Schedules:	Prepared by:	Date:
Specifications:	Prepared by:	Date:
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by:	Date:

Standards, codes or guidelines relied on in design process:

AS 1170.0 General Principals (2002)
 AS 1170.1 Permanent & Other Actions (2002)
 AS 1170.4 Earthquake Loads (2007)
 AS 4100 Steel Structures Code (1998)
 AS 4600 Cold Formed Section Code (2018)
 AS 2870 Residential Slabs and Footings (2011)
 AS 1170.2 Wind Load (2011)

Any other relevant documentation:

Error! Reference source not found.

Attribution as designer:

I am responsible for the design of that part of the work as described in this certificate.

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

Designer: Name: (print) Signed Date

	Approved - General
	Manager Consent Only
GMC Licence No.	25/06/2021

Assessment of Certifiable Works: (TasWater)	
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Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.

If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.

TasWater must then be contacted to determine if the proposed works are Certifiable Works.

I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- ☐ The works will not increase the demand for water supplied by TasWater
- ☐ The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- ☐ The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- ☐ The works will not damage or interfere with TasWater's works
- ☐ The works will not adversely affect TasWater's operations
- ☐ The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- ☐ I have checked the LISTMap to confirm the location of TasWater infrastructure
- ☐ If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

Certification:	
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I being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:			25/06/2021

**Steeline Hobart**

ABN: 75 009 543 506
 Address: 1 Whitestone Drive
 Austins Ferry TAS 7011
 Email: tassiesheds@steeline.com.au
 Web: www.steeline.com.au

Phone: (03) 6249 4988
 Fax: (03) 6249 3838

Wind

No: **310725**
 Date: 24/06/2021

Portal Garage/Shed Specifications

Site Address: 28 Mcrobies Rd, South Hobart, TAS 7004, Australia
Dimensions: 10.0 m Wide × 20.0 m Long with a 4.5 m average roof height (-58.6° Orientation)
NCC Compliance: This shed has been designed with restricted internal pressures, Cpi = +0.2 & -0.3.
 Roller door supply must comply with AS4505

Site Location

The following map, obtained from Google Maps Imagery (©2021 Google), shows the site location:

**Wind Load (AS/NZS 1170.2:2011)**

The following table summarizes the wind parameters for this site:

Parameter	N	NE	E	SE	S	SW	W	NW
Importance Level	2 (1:500 Wind)							
Wind Region	A3 ($V_r = 45$ m/s)							
Wind Directional Multiplier M_d	0.85	0.80	0.80	0.80	0.80	0.85	0.90	1.00
Terrain Category	2.29	2.06	2.50	2.26	2.35	2.00	2.00	2.03
Terrain/height Multiplier $M_{z,cat}$	0.89	0.91	0.87	0.89	0.88	0.91	0.91	0.91
Shielding Multiplier M_s	0.90	0.83	0.84	1.00	1.00	1.00	1.00	1.00
Topographic Multiplier M_t	1.00	1.16	1.03	1.13	1.13	1.15	1.15	1.00
Site Wind Speed $V_{sit,3}$	31.34	31.50	30.00	37.12	37.12	40.16	42.52	40.95
Ultimate Design Wind Speed V_{des}	42.52 m/s (1.08 kPa)							
Service Design Wind Speed V_s	33.03 m/s (0.65 kPa)							






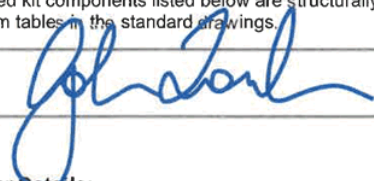
The following site map shows the site in relation to the terrain category boundary (©2021 Google):



Shielding Map

The following site map shows the site in relation to the shielding boundary (©2021 Google):



	Approved - General Manager Consent Only GMC-2148 09/06/2021	<h2 style="text-align: center;">Shed Kit Compliance Statement</h2>	
			
Order Number: 310725			
I certify that the shed kit components listed below are structurally adequate for their purpose. This document takes precedence over selections from tables in the standard drawings.			
Signed: 		Date: 25 June 2021	
<u>Customer Details:</u>			
Customer Name:		TIFRENO BUILDERS - Glen	
Site Address:		28 Mcrobies Rd South Hobart TAS 7004	
<u>Building Specifications:</u>			
Length:	20.00m		
Width:	10.00m		
Height:	3.60m		
Building Style:	Portal Frame Shed		
Roof Style:	Gable / Skillion		
Roof Pitch:	10 °		
Roof Cladding:	Corrugated 0.42 BMT		
Roof Screws:	14 - 10 x 50 SDM Hex Seal		
Wall Cladding:	Steelclad 0.42 BMT		
Wall Screws:	10 - 16 x 16 Hex		
Roller-Doors:	1 x Series "AA" Windlocked Roller-Door (3000 x 3700)		
P/A Doors:	1 x Personal Access Door (2040 x 820)		
Windows:	N / A		
Wall Insulation:	Foil Sisalation (60m) Type 456		
Full Coverage:	Safety Mesh (2mm)		
End Portal Frame:	C20024		
Internal Portal Frame:	C20024		
Knee Braces:	N / A		
Apex Braces	N / A		
Roof Purlin Type:	TopHat 120mm 1.20 BMT		
Max Purlin Spacing:	866mm		
Wall Girt Type:	TopHat 120mm 1.20 BMT		
Max Girt Spacing:	1050mm		
Bay Count:	5		
Bay Sizes:	3.88m, 3.88m, 4.50m, 3.88m, 3.88m		
NCC Compliance:	This shed has been designed with restricted internal pressures coefficient, Cpi = +0.2 & - 0.3. Roller door supply must comply with AS4505.		



Approved - General
Manager Consent Only
GMC-21-48 09/08/2021

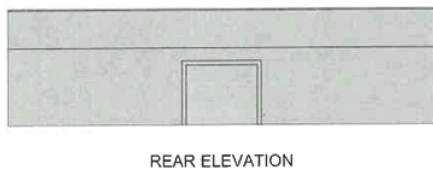
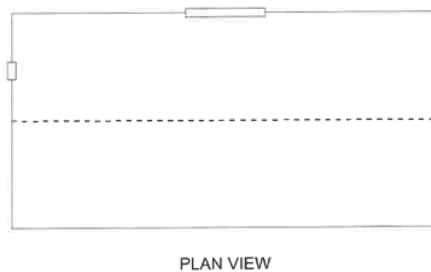
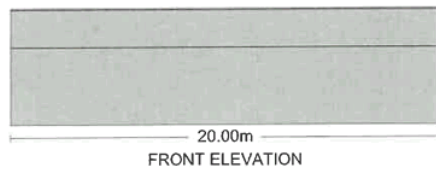
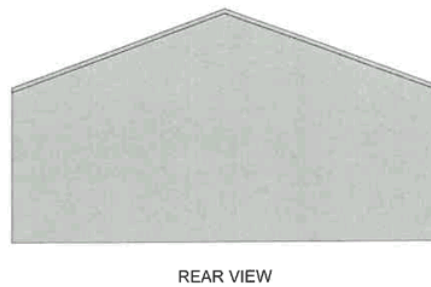
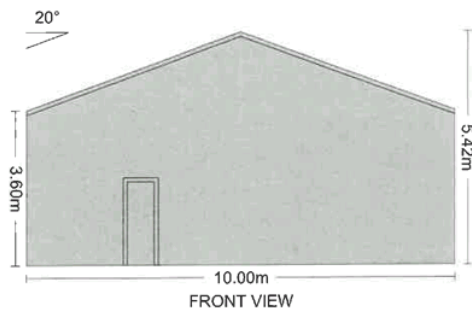
**Steeline Hobart**

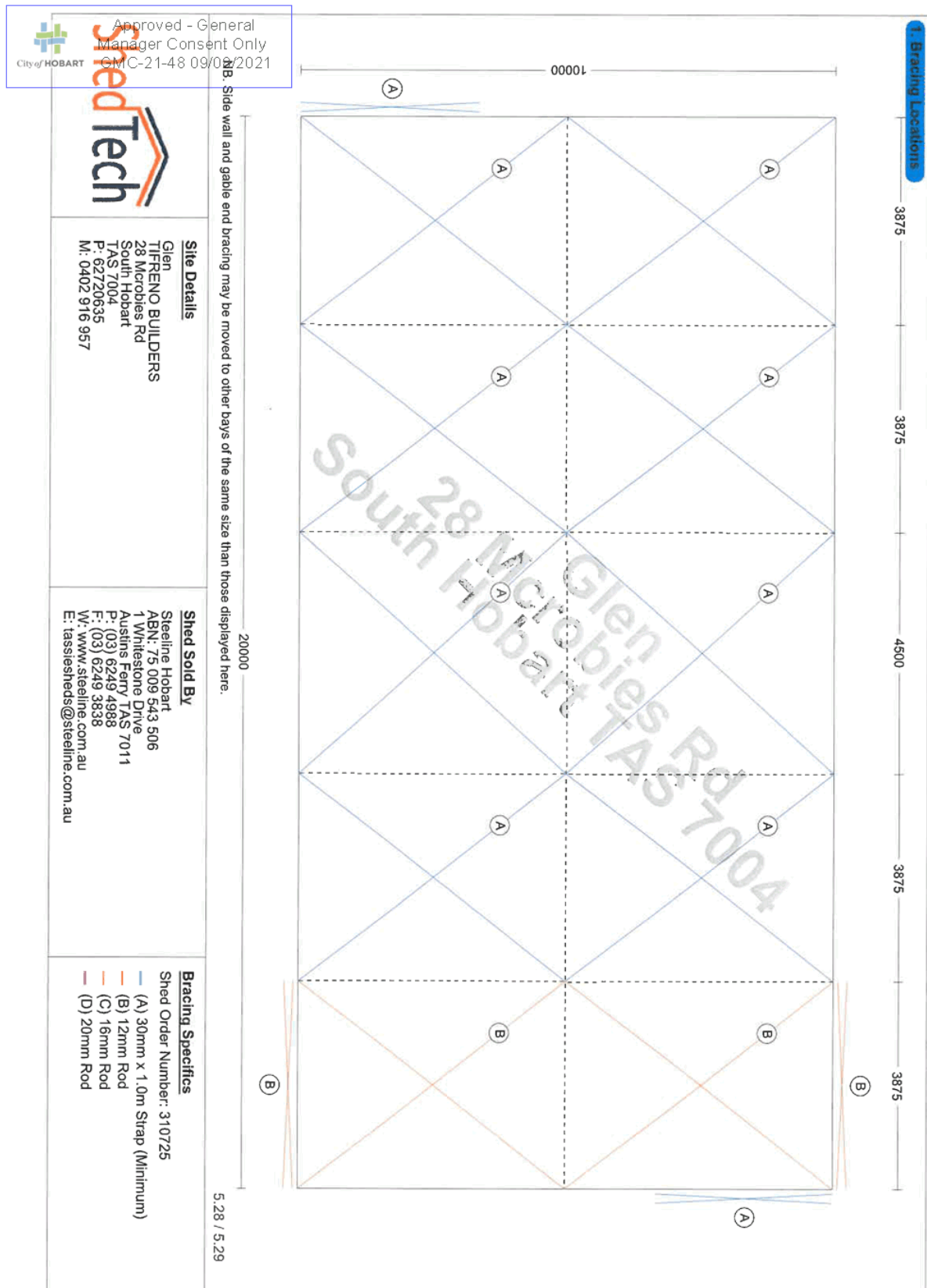
ABN: 75 009 543 506
Address: 1 Whitestone Drive
Austins Ferry TAS 7011
Email: tassiesheds@steeline.com.au
Web: www.steeline.com.au

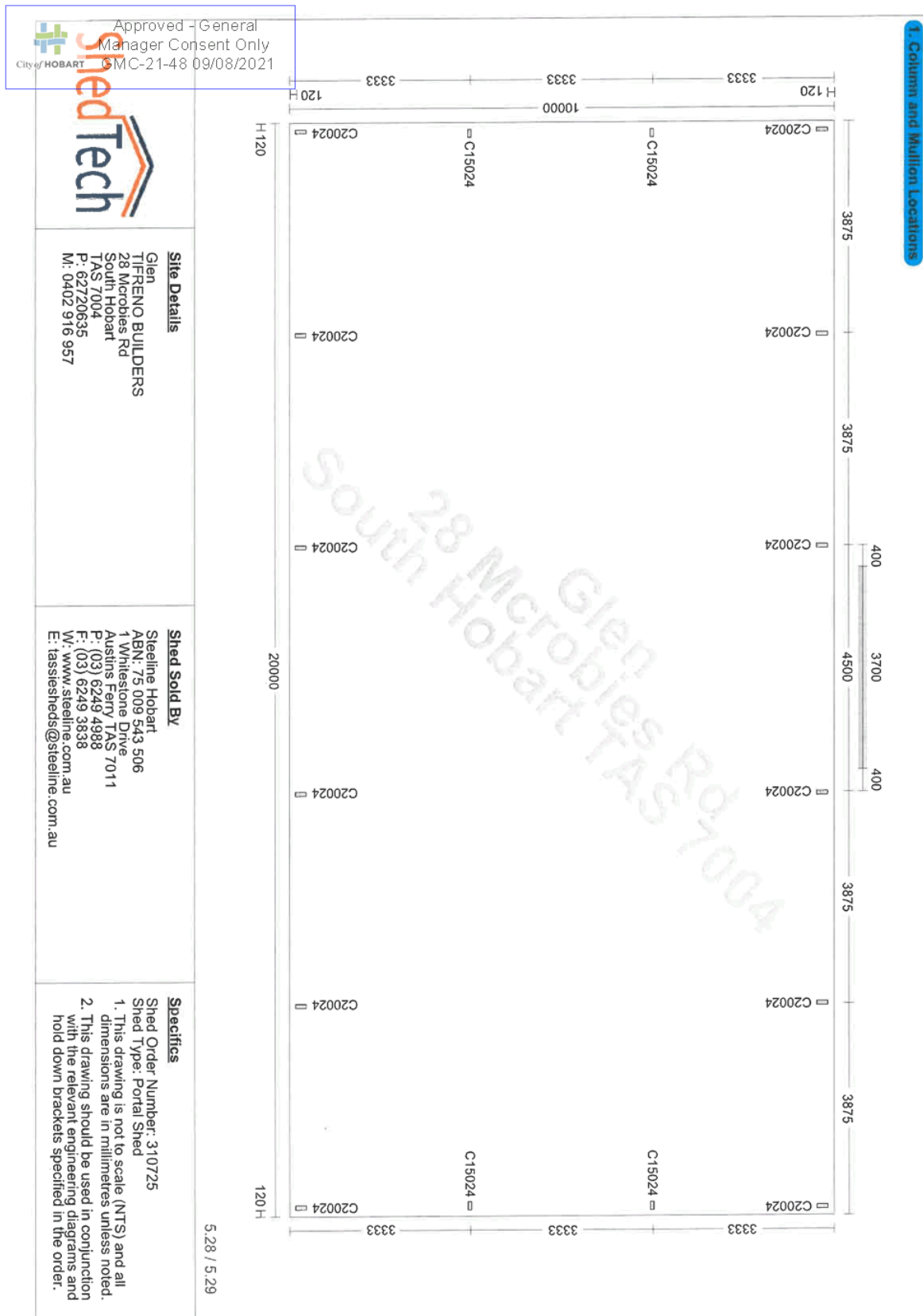
Phone: (03) 6249 4988
Fax: (03) 6249 3838

Order

No: 310725
Date: 24/06/2021







Fly Brace Locations

Approved - General
Manager Consent Only
GMC-21-48 09/08/2021

Site Details

Glen
TIFRENO BUILDERS
28 Microbies Rd
South Hobart
TAS 7004
P: 62720635
M: 0402 916 957

Shed Sold By

Steelline Hobart
ABN: 75 009 543 506
1 Whitestone Drive
Austins Ferry TAS 7011
P: (03) 6249 4988
F: (03) 6249 3838
W: www.steelline.com.au
E: tassiesheds@steelline.com.au


Fly Brace Specifics

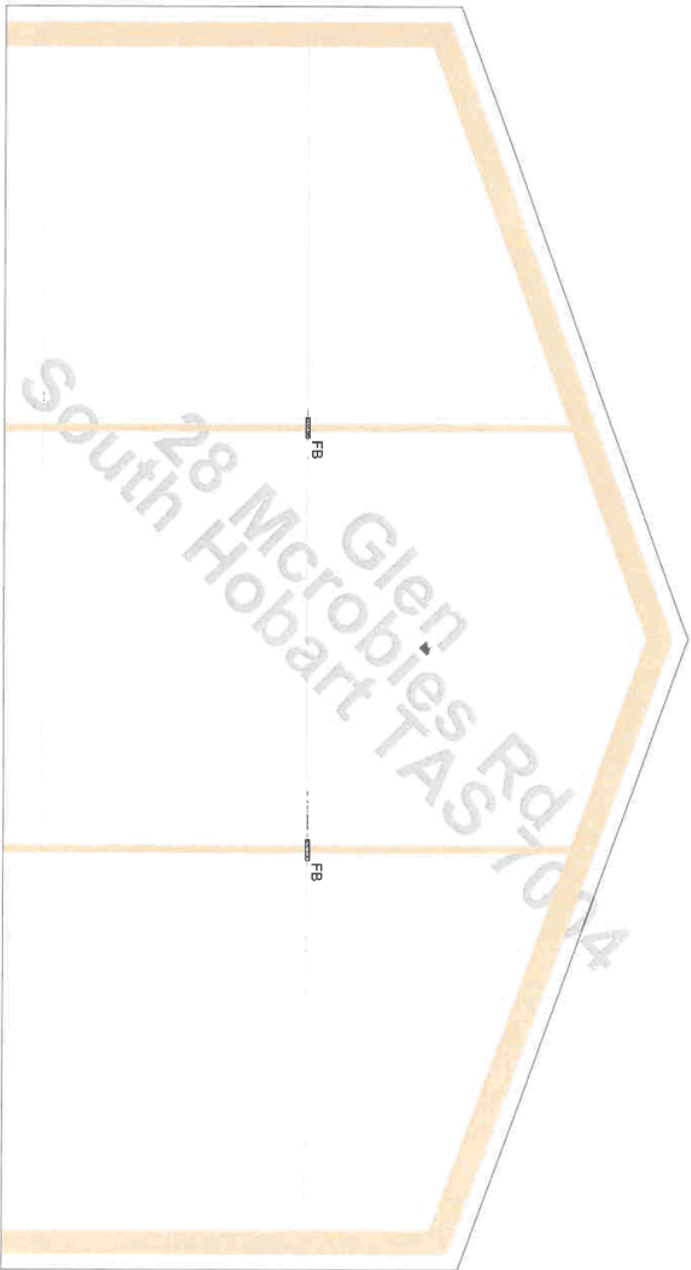
Shed Order Number: 310725
- Roof View

5.28 / 5.29

<div>City of HOBART</div> <div>Approved + General Manager Consent Only CMC-21-48 09/08/2021</div>		<div>1. Fly Brace Locations</div> <div></div>	
<div><div>ShedTech</div><div><div>Site Details</div><div>Glen TIFRENO BUILDERS 28 Microbics Rd South Hobart TAS 7004 P: 62720635 M: 0402 916 957</div></div></div>		<div><div>Shed Sold By</div><div>Steelline Hobart ABN: 75 009 543 506 1 Whitestone Drive Austins Ferry TAS 7011 P: (03) 6249 4968 F: (03) 6249 3838 W: www.steelline.com.au E: tassiesheds@steelline.com.au</div></div>	
<div><div>Fly Brace Specifics</div><div>Shed Order Number: 310725 - Length Side View</div></div>		5.28 / 5.29	

<div>City of HOBART</div> <div>Approved - General Manager Consent Only CMC-21-48 09/08/2021</div>		<div>1 Fly Brace Locations</div>	
<div>SteelTech</div>	<div><div>Site Details</div><div>Glen TIFRENO BUILDERS 28 Macrobies Rd South Hobart TAS 7004 P: 62720635 M: 0402 916 957</div></div>	<div><div>Shed Sold By</div><div>Steelline Hobart ABN: 75 009 543 506 1 Whitestone Drive Austins Ferry TAS 7011 P: (03) 6249 4988 F: (03) 6249 3838 W: www.steelline.com.au E: tassiesheds@steelline.com.au</div></div>	<div><div>Fly Brace Specifics</div><div>Shed Order Number: 310725 - Reverse Length Side View</div></div>
5.28 / 5.29			

<div>City of HOBART</div> <div>Approved - General Manager Consent Only GMC-21-48 09/08/2021</div>			<div>1. Fly Brace Locations</div> 	
<div><div>ShedTech</div><div>Glen TIFRENO BUILDERS 28 Microbies Rd South Hobart TAS 7004 P: 62720635 M: 0402 916 957</div></div>	<div><div>Site Details</div><div>Shed Sold By</div></div>		<div><div>5.28 / 5.29</div></div>	
<div><div>Steelline Hobart ABN: 75 009 543 506 1 Whitestone Drive Austins Ferry TAS 7011 P: (03) 6249 4968 F: (03) 6249 3838 W: www.steelline.com.au E: tassisheds@steelline.com.au</div></div>	<div><div>Fly Brace Specifics</div><div>Shed Order Number: 310725 - Width View</div></div>			

<div>City of HOBART</div> <div>Approved - General Manager Consent Only CMC-21-48 09/08/2021</div>		<div>1. Fly Brace Locations</div> <div></div>	
<div><div>SteelTech</div><div><div>Site Details</div><div>Glen TIFRENO BUILDERS 28 Mcrobles Rd South Hobart TAS 7004 P: 62720635 M: 0402 916 957</div></div></div>		<div><div>Shed Sold By</div><div>Steelline Hobart ABN: 75 009 543 506 1 Whitestone Drive Austins Ferry TAS 7011 P: (03) 6249 4988 W: www.steelline.com.au E: tassiesheds@steelline.com.au</div></div>	
		<div><div>Fly Brace Specifics</div><div>Shed Order Number: 310725 - Reverse Width View</div></div>	

5.28 / 5.29

[illegible]

1. Purlin and Girt Layout

Approved - General Manager Consent Only
CMC-21-48 09/08/2021

Site Details

Glen TIFRENO BUILDERS
28 Macrobles Rd
South Hobart
TAS 7004
P: 62720635
M: 0402 916 957

Shed Sold By

Steelline Hobart
ABN: 75 009 543 506
1 Whitestone Drive
Austins Ferry TAS 7011
P: (03) 6249 4988
F: (03) 6249 3838
W: www.steelineds.com.au
E: tassiesheds@steelineds.com.au

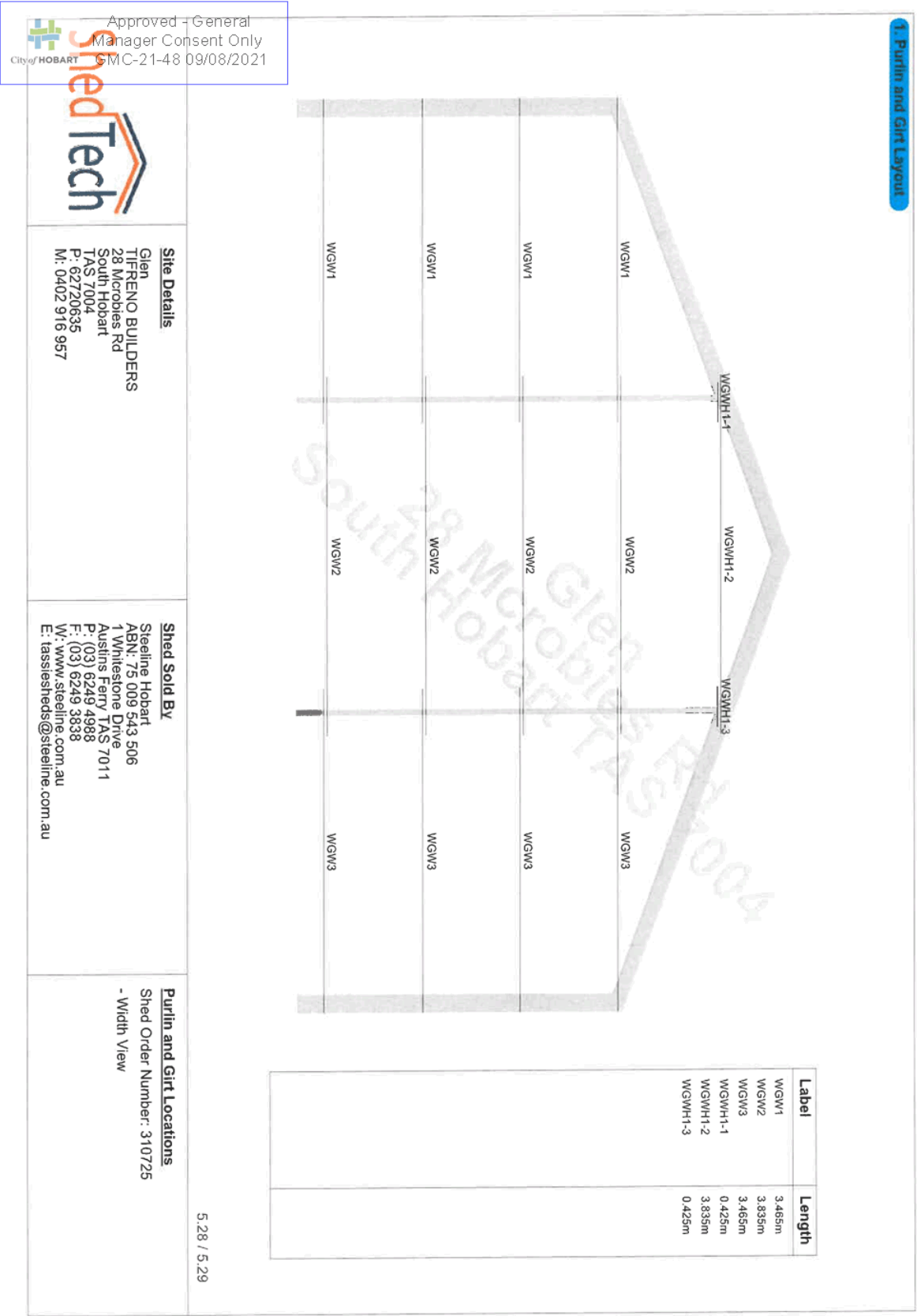
Purlin and Girt Locations

Shed Order Number: 310725

- Roof Purlins
- (*) Place purlins as close to knee as possible
- (v) Place purlins as close to apex as possible

5.28 / 5.29

Label	Length
RP1	4.170m
RP2	4.505m
RP3	5.175m
RP4	4.505m
RP5	4.170m





Site Details
Glen
TIFRENO BUILD
28 Microbies Rd
South Hobart
TAS 7004
P: 62720635
M: 0402 916 957

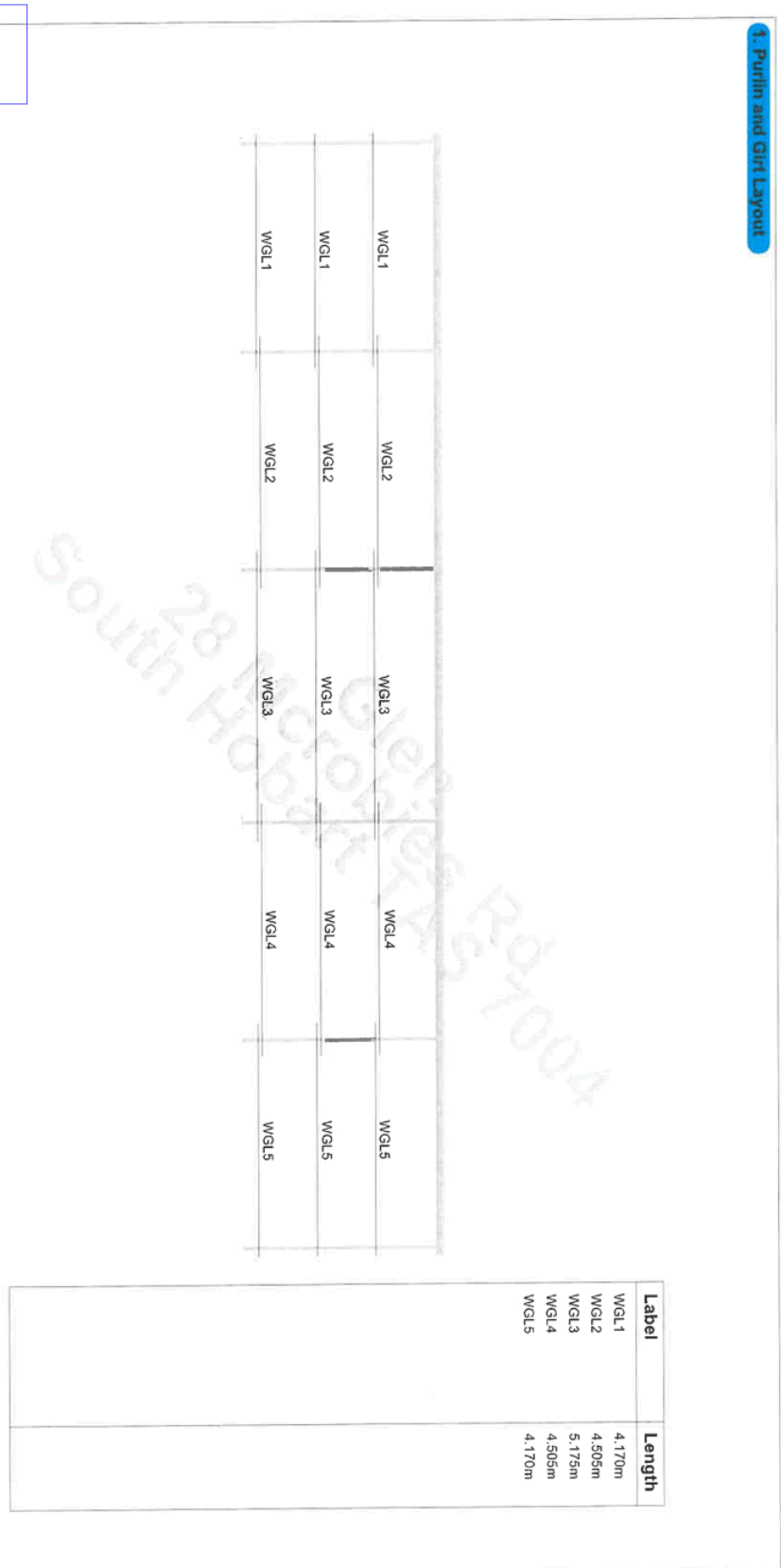
Shed Sold By
Steelline Hobart
 ABN: 75 009 543 506
 1 Whiteslane Drive
 Austins Ferry TAS 7011
 P: (03) 6249 4988
 F: (03) 6249 3838
 W: www.steelline.com.au
 E: tassiesheds@steelline.com.au

Purlin and Girt Locations
Shed Order Number: 310725
- Reverse Width View

5.28 / 5.29



Label	Length
WGRW1	3.465m
WGRW2	3.835m
WGRW3	3.465m
WGRWH1-1	0.425m
WGRWH1-2	3.835m
WGRWH1-3	0.425m





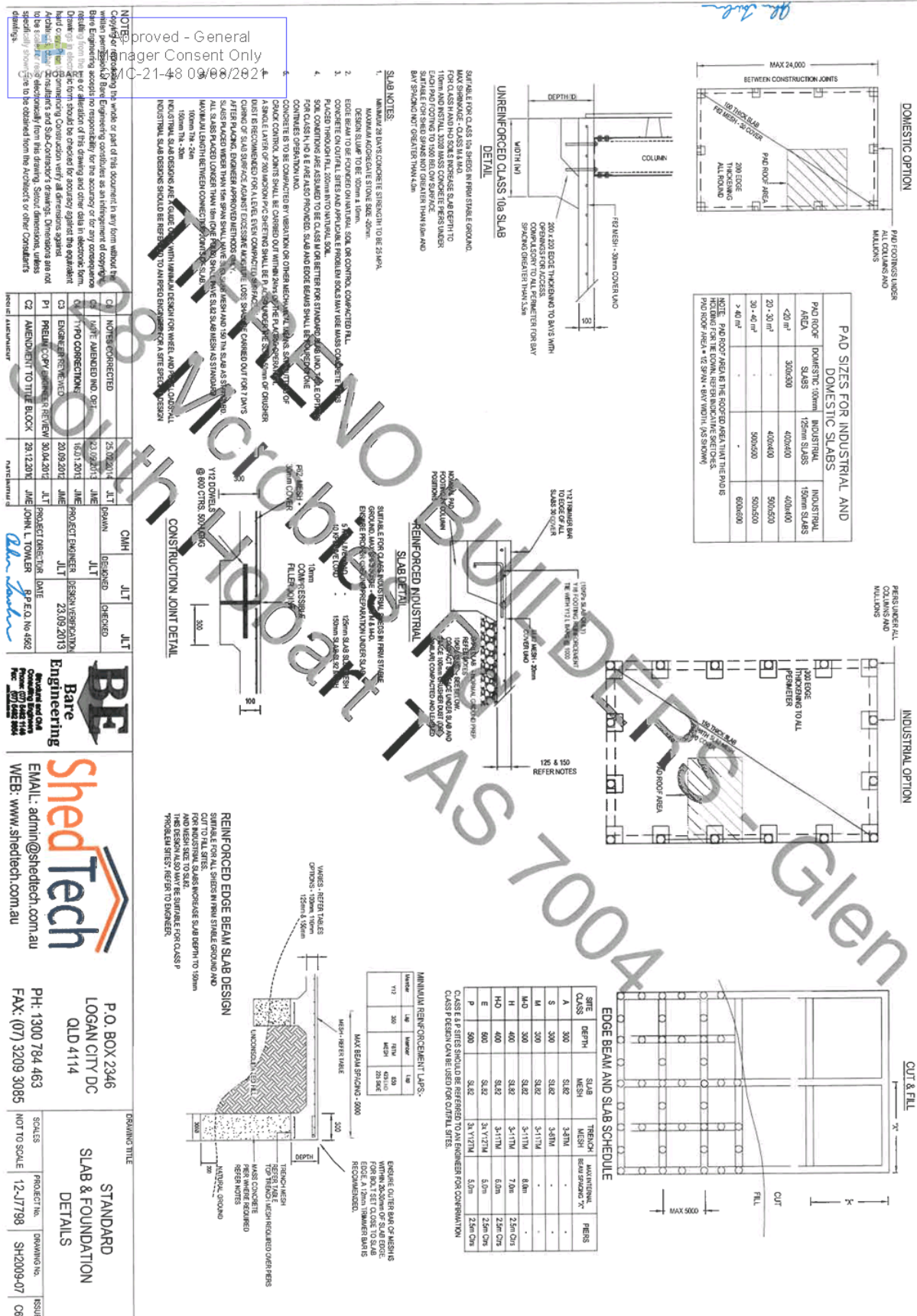
Shed Sold By
Steeleline Hobart
ABN: 75 009 543 506
1 Whiststone Drive
Austins Ferry TAS 7011
P: (03) 6249 4988
F: (03) 6249 3838
W: www.steeline.com.au
E: tassiestheds@steeline.com.au

Purlin and Girt Locations
Shed Order Number: 310725
- Reverse Length View

5.28 / 5.29

Label	Length
WGRL1	4.170m
WGRL2	4.420m
WGRL4	4.420m
WGRL5	4.170m

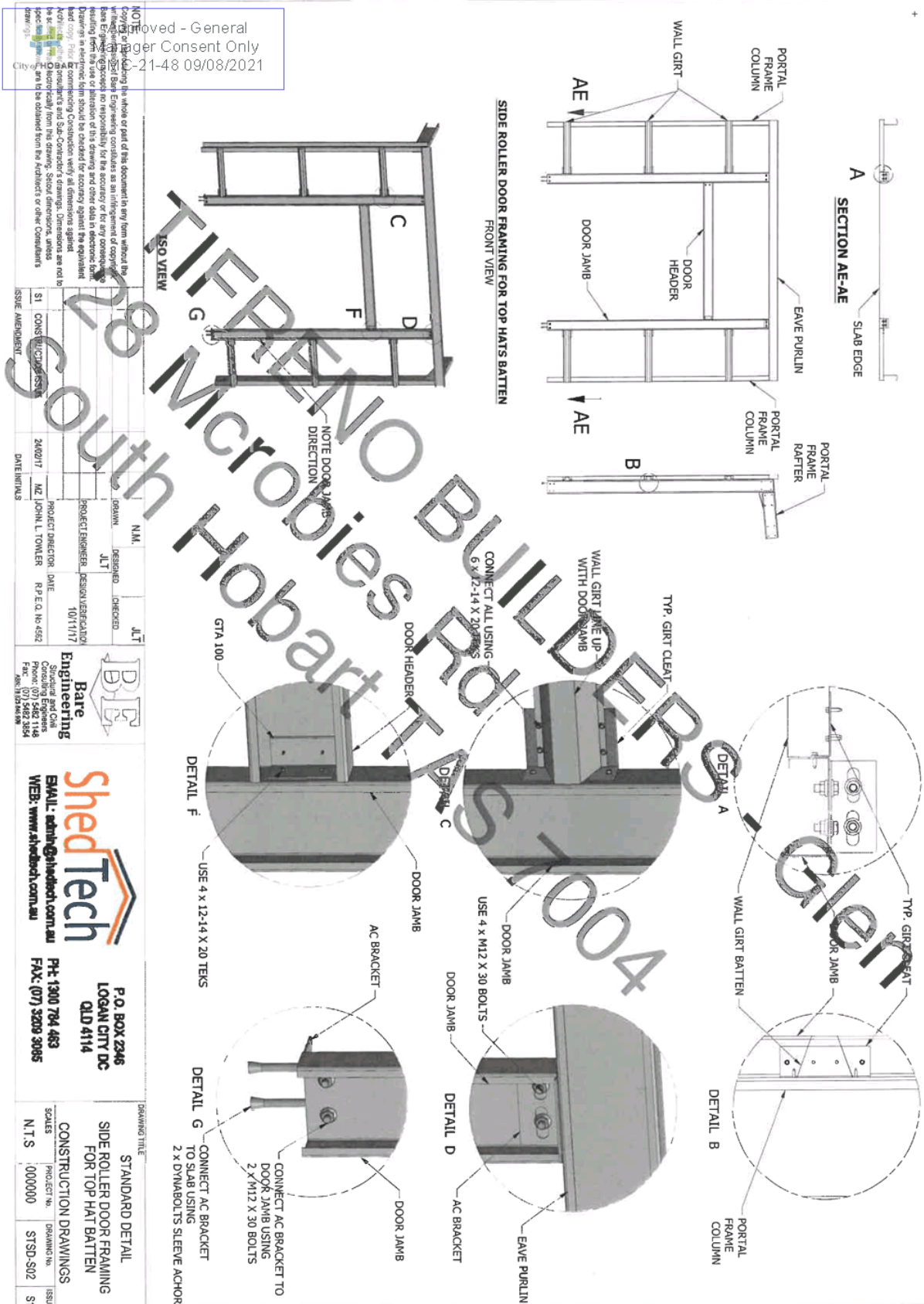
1. Purlin and Girt Layout:



PIER ONLY DETAILS FOR PORTAL FRAME SHEDS

THE TABLE REPRESENTS THE REQUIREMENTS FOR ENCLOSED SHEETS OF PIER SIZES AND SPANS NOTED
MAXIMUM HEIGHT OF SHEETS FOR THESE FOOTINGS SHALL NOT BE MORE THAN 6M AND NOT MORE THAN 66% OF SPAN.
THE SPAN, BAY AND HEIGHTS NOTED IN THE TABLE REPRESENT MINIMUM REQUIREMENTS

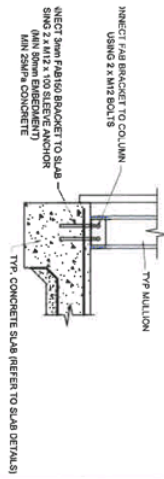
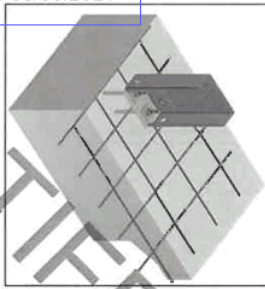
2m BAYS										3m BAYS										4m BAYS										5m BAYS										6m BAYS										7m BAYS										8m BAYS										9m BAYS										10m BAYS										12m BAYS										15m BAYS										18m BAYS										21m BAYS										24m BAYS										27m BAYS										30m BAYS										33m BAYS										36m BAYS										39m BAYS										42m BAYS										45m BAYS										48m BAYS										51m BAYS										54m BAYS										57m BAYS										60m BAYS										63m BAYS										66m BAYS										69m BAYS										72m BAYS										75m BAYS										78m BAYS										81m BAYS										84m BAYS										87m BAYS										90m BAYS										93m BAYS										96m BAYS										99m BAYS										102m BAYS										105m BAYS										108m BAYS										111m BAYS										114m BAYS										117m BAYS										120m BAYS										123m BAYS										126m BAYS										129m BAYS										132m BAYS										135m BAYS										138m BAYS										141m BAYS										144m BAYS										147m 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BAYS										618m BAYS										621m BAYS										624m BAYS										627m BAYS										630m BAYS										633m BAYS										636m BAYS										639m BAYS										642m BAYS										645m BAYS										648m BAYS										651m BAYS										654m BAYS										657m BAYS										660m BAYS										663m BAYS										666m BAYS										669m BAYS										672m BAYS										675m BAYS										678m BAYS										681m BAYS										684m BAYS										687m BAYS										690m BAYS										693m BAYS										696m BAYS										699m BAYS										702m BAYS										705m BAYS										708m BAYS										711m BAYS										714m BAYS										717m BAYS										720m BAYS										723m BAYS										726m BAYS										729m BAYS										732m BAYS										735m BAYS										738m BAYS										741m BAYS										744m BAYS										747m BAYS										750m BAYS										753m BAYS										756m BAYS										759m BAYS										762m BAYS										765m BAYS										768m BAYS										771m 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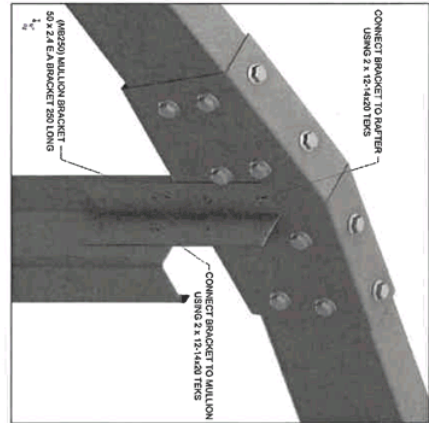
NOTE: This drawing is a detail of a component of the building and is not to be used in isolation. It is intended to be used in conjunction with the other drawings of the building. The drawings are not to be used for construction without the approval of the architect. The drawings are not to be used for construction without the approval of the architect. The drawings are not to be used for construction without the approval of the architect.

Approved - General
Manager Consent Only
C-21-48 09/08/2021

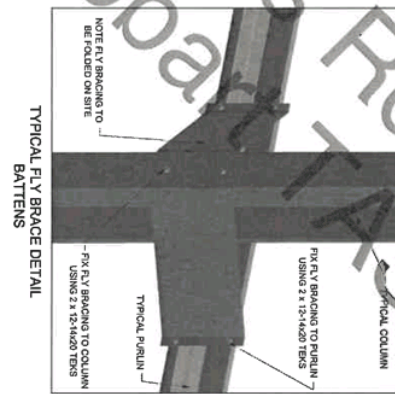
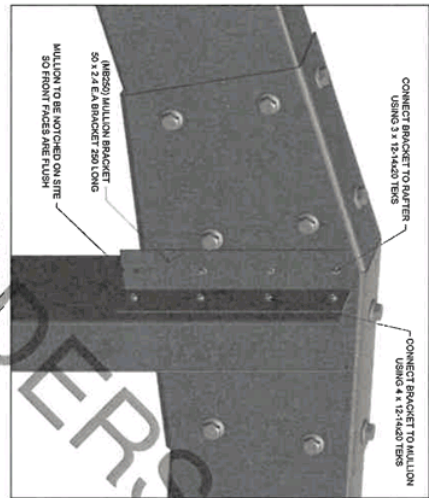
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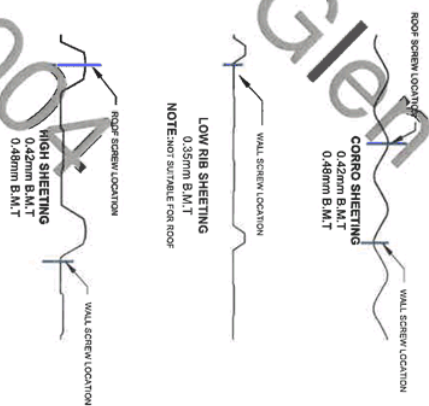
ALTERNATIVE MULLION CONNECTION DETAIL



MULLION CONNECTION DETAIL



TYPICAL FLY BRACE DETAIL
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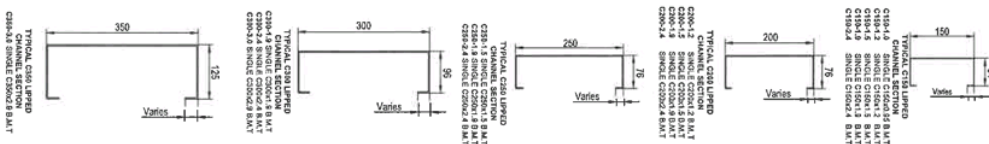
SI	CONSTRUCTION ISSUE	10/02/15	NZ
S2	DRAWING UPDATE	28/06/20	NZ

PROJECT ENGINEER	DATE	CHECKED	DATE
JOHN L. TOWLER	R.P.E.D. No 4552	J.L.T.	10/02/15

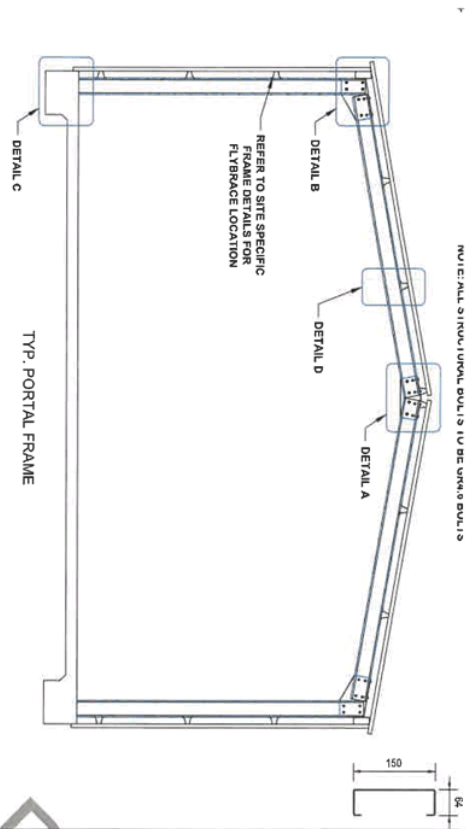


P.O. BOX 2346
LOGAN CITY DC
QLD 4114
PH: 1300 784 463
E.V.V. 1071 3700 2002

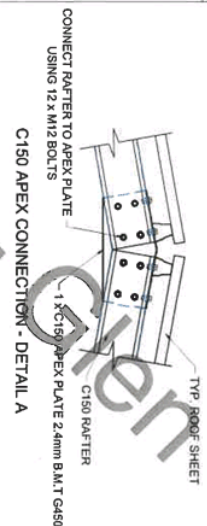
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PROJECT NO.	DRAWING NO.
SCALE	ST IN 1/4"







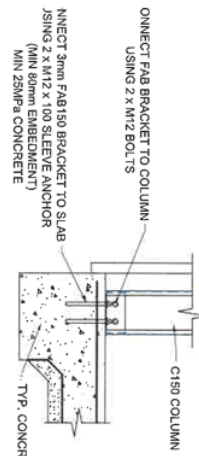
NOTE: REPRESENTATION ONLY REFER TO JOB SPECIFIC DOCUMENTATION FOR EXACT PURLIN PLACEMENT AND OVER LAP SPECIFICATIONS



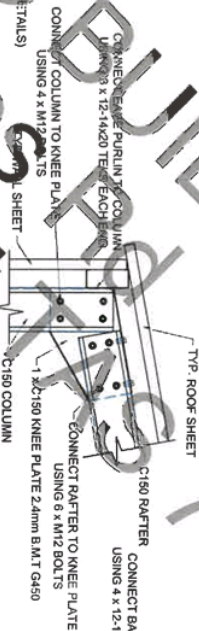
TYP. CUSTOM ORB SHEETING - 0.42 B.M.T
ROOF SHEET FIXING : 12-14x5 TEKS (RIB FIXING)
CYCLONIC REGIONS REQUIRE 14-12x5 TEKS
WALL SHEET FIXING: 10-16x16 TEKS (PAN FIXING)



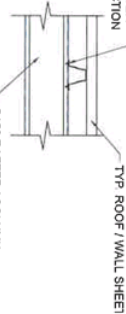
TYP. TRIMDEK SHEETING - 0.42 B.M.I.
ROOF SHEET FIXING : 12-14x45 TEKS (RIB FIXING)
CYCLONIC REGIONS REQUIRE 14-12x55 TEKS
WALL SHEET FIXING: 10-16x16 TEKS (PAN FIXING)



C150 FOOTING ANGLE BRACKET OPTION - DETAIL C
THIS IS ONLY SUITABLE FOR BUILDING UNDER 3m HIGH



BATTEN TO COLUMN / RAFTER CONNECTION - DETAIL I



DRAFTING TITLE

7/19/2015 10:00 AM
 The undersigned hereby certifies that the whole or part of this document is my own without the permission of the undersigned. I am not a co-author, contributor, or otherwise involved in the preparation of this document. I am not a co-author, contributor, or otherwise involved in the preparation of this document. I am not a co-author, contributor, or otherwise involved in the preparation of this document.

SI	CONSTRUCTION ISSUE	10/02/15	M2	JLT	
				DESIGNED	CHECKED
	PROJECT ENGINEER				
	DESIGN VERIFICATION				
	10/02/15				
	PROJECT INSPECTOR				
	DATE				



P.O. BOX 2346
LOGAN CITY D
QLD 4114

SCALES	PROJECT No.	DRAWING No.	IS
UNIT TO SCALE		STATION 141	

Application Referral Environmental Development Planner - Response

From:	Rowan Moore Environmental Development Planner 7 December 2021
Recommendation:	Proposal is acceptable subject to conditions.
Date Completed:	
Address:	30 MCROBIES ROAD, SOUTH HOBART
Proposal:	Outbuilding (Storage Shed)
Application No:	PLN-21-492
Assessment Officer:	Mark O'Brien,

Referral Officer comments:

Codes Applicable:

Code	Applicable	Exempt	Permitted	Discretionary
E1.0 Bushfire- Prone Areas	No			
E3.0 Landslide	Yes	No	No	Yes - E3.7.1 P1
E9.0 Attenuation	Yes	No	Yes - E9.7.1 A1	
E10.0 Biodiversity	No			
E11.0 Waterway & Coastal	Yes	No	No	Yes - E11.7.1 P1
E15.0 Inundation Prone Areas	No			
E16.0 Coastal Erosion	No			
E18.0 Wind & Solar Energy	No			
E20.0 Acid Sulfate Soils	No			

Assessment:

Approval is sought for a 200m² storage shed for storage of recyclables at McRobies Gully Waste Management Centre. The shed would be located in a location previously occupied by a similar shed that was demolished due to fire damage.



Image 1: Location of proposed shed (note that building in image has been demolished)

Referral to the EPA Board is not require as the development is ancillary to the waste depot.

Landslide Code

The Landslide code applies because development is proposed within a Landslide Hazard Area (Low LHA). This LHA is due to a modelled susceptibility to debris flow.

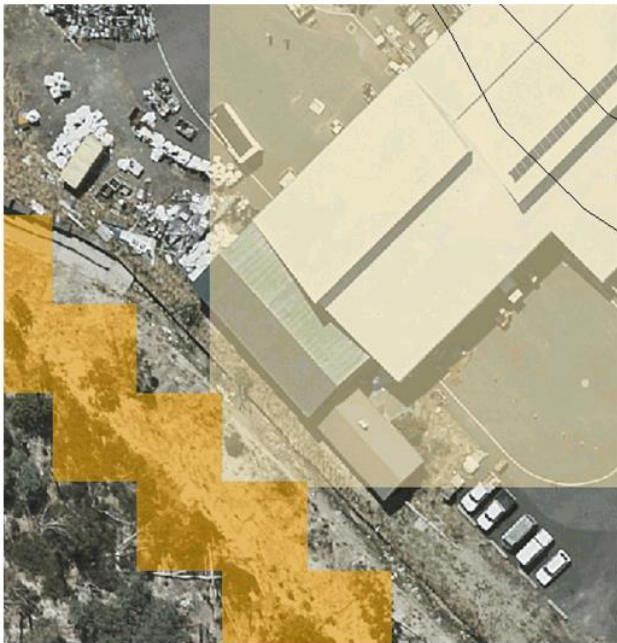


Image 2: Landslide Hazard Areas

The proposed building is exempt pursuant to exemption clause E3.4(c) however associated works are not specifically exempt (ground disturbance for slab).

The relevant standards for the works are under clause E3.7.1. There is no acceptable solution for A1. P1 states the following:

Buildings and works must satisfy all of the following:

(a) no part of the buildings and works is in a High Landslide Hazard Area;

(b) the landslide risk associated with the buildings and works is either:

(i) acceptable risk; or

(ii) capable of feasible and effective treatment through hazard management measures, so as to be tolerable risk.

No works are proposed within a High LHA in conformity with P1(a).

'Acceptable risk' is defined as 'a risk society is prepared to accept as it is. That is; without management or treatment'.

The debris flow modelling identifies the land as a potential debris flow runout area, not a source area, so the works are unlikely to increase the likelihood of a debris flow occurring. The works will also not significantly increase the consequences if a debris flow were to occur, so in my opinion, the risk associated with the works is acceptable without risk treatment.

It should also be noted that Council's internal debris flow modelling, which is considered to be more sophisticated than the State modelling, does not identify any debris flow risk on this land.

The application is considered consistent with P1 and the exercise of discretion is recommended.

Attenuation Code

The Attenuation Code applies because development for an activity listed in Table E9.1 is proposed (waste transfer station). No exemptions apply.

The relevant standards are under clause E9.7.1. Acceptable solution A1 states '*development for use with potential to cause environmental harm has a separation distance no less than the minimum attenuation distance listed in Tables E9.1 or E9.2*'.

The attenuation distance for a waste transfer station is 150m and there are no sensitive uses within 150m of the proposed development site so the application complies with E9.7.1 A1.

Waterway and Coastal Protection Code

The Waterway and Coastal Protection Code applies because development is proposed within a waterway protection area. A stormwater drain is located immediately adjacent the proposed development site.



Image 3: Watercourse

No Code exemptions apply.

The relevant standard are under clause E11.7.1. The application does not comply with A1. P1 states the following:

Building and works within a Waterway and Coastal Protection Area must satisfy all of the following:

- (a) avoid or mitigate impact on natural values;*
- (b) mitigate and manage adverse erosion, sedimentation and runoff impacts on natural values;*
- (c) avoid or mitigate impacts on riparian or littoral vegetation;*
- (d) maintain natural streambank and streambed condition, (where it exists);*
- (e) maintain in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation;*
- (f) avoid significantly impeding natural flow and drainage;*
- (g) maintain fish passage (where applicable);*
- (h) avoid landfilling of wetlands;*
- (i) works are undertaken generally in accordance with 'Wetlands and Waterways Works Manual' (DPIWE, 2003) and 'Tasmanian Coastal Works Manual' (DPIPWE, Page and Thorp, 2010), and the unnecessary use of machinery within watercourses or wetlands is avoided.*

The watercourse is effectively a stormwater drain with minimal natural values. There should be no impact to natural values from erosion, sedimentation or runoff from the development site, provided that soil and water management measures are implemented during construction (condition recommended).

The development should have no impact on riparian vegetation, streambank condition or in-stream habitat.

The development should have no impact on natural flow and drainage or fish passage.

No wetlands would be impacted.

Standard soil and water management measures will ensure the works are in accordance with the Waterways and Wetlands Works Manual.

The application is considered consistent with E11.7.1 P1 and the exercise of discretion is recommended.

Recommended Conditions:

ENV 1 - SWM

Recommended Advice:

N/A

8. REPORTS

8.1 Monthly Building Statistics - 1 December - 31 December 2021 File Ref: F22/3040

Memorandum of the Director City Planning of 17 January 2022 and attachments.

Delegation: Council



City of **HOBART**

MEMORANDUM: CITY PLANNING COMMITTEE

**Monthly Building Statistics - 1 December - 31 December
2021**

Attached is the Building Permit Statistics for the period 1 December - 31 December 2021.

RECOMMENDATION

That:

The Director City Planning reports:

Building Statistical Report:

During the period 1 December 2021 to 31 December 2021, 46 permits were issued to the value of \$15,427,382 which included:

- (i) 25 for extensions/alterations to dwellings to the value of \$3,734,587;
- (ii) 6 new dwellings to the value of \$2,363,195;
- (iii) 27 new multiple dwellings to the value of \$3,950,000; and
- (iv) 1 major project:
 - (a) 431 Elizabeth Street, North Hobart - 27 Multiple Dwellings - \$3,950,000;

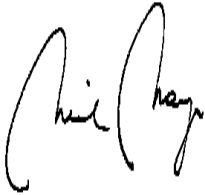
During the period 1 December 2020 to 31 December 2020, 56 permits were issued to the value of \$11,649,479 which included:

- (i) 31 for extensions/alterations to dwellings to the value of \$4,509,648;
- (ii) 7 new dwellings to the value of \$2,567,000;
- (iii) 2 new multiple dwellings to the value of \$500,000; and
- (iv) 0 major projects:

In the twelve months ending December 2021, 608 permits were issued to the value of \$254,943,922; and

In the twelve months ending December 2020, 641 permits were issued to the value of \$180,406,244.

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.





Neil Noye

DIRECTOR CITY PLANNING

Date: 17 January 2022

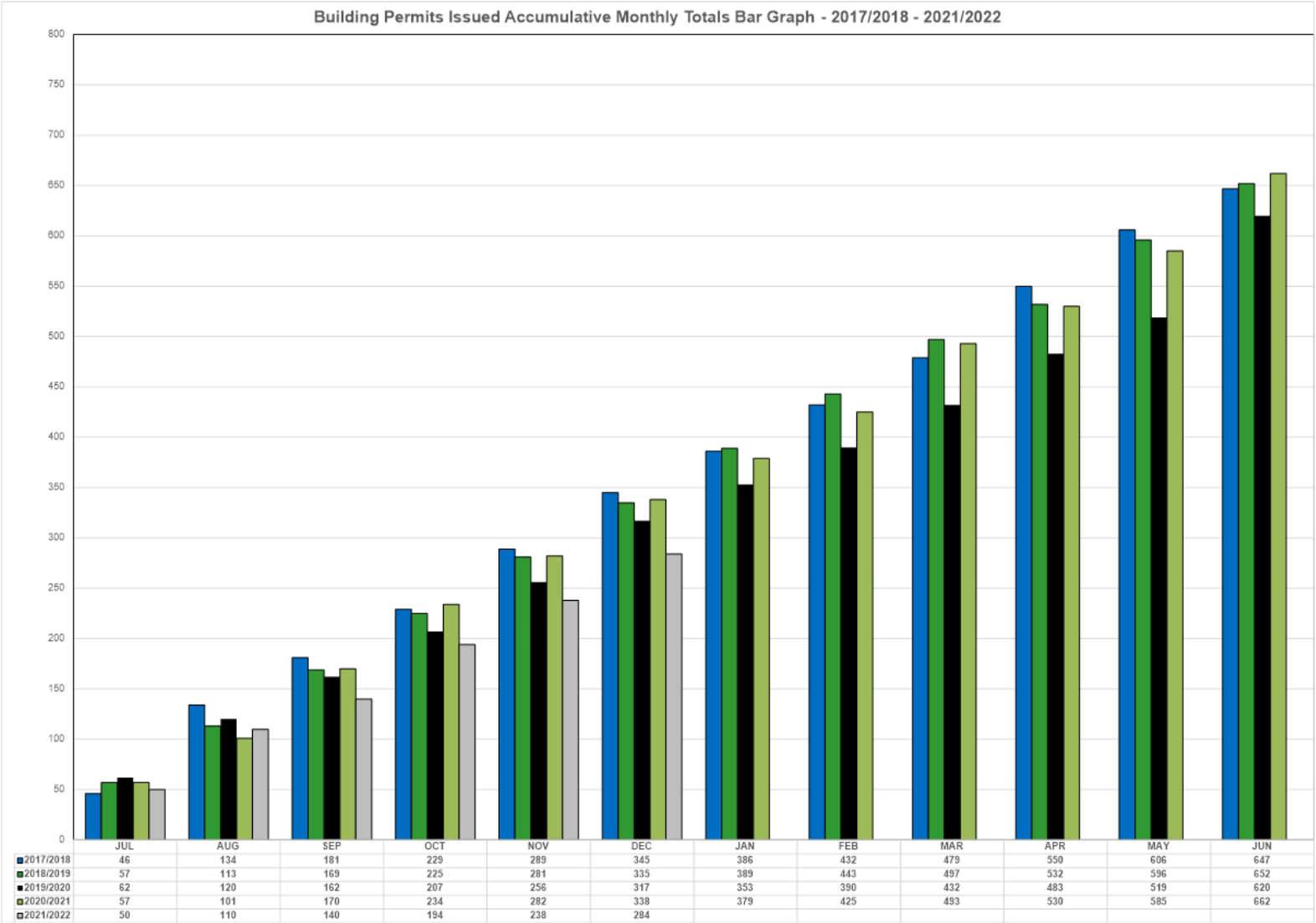
File Reference: F22/3040

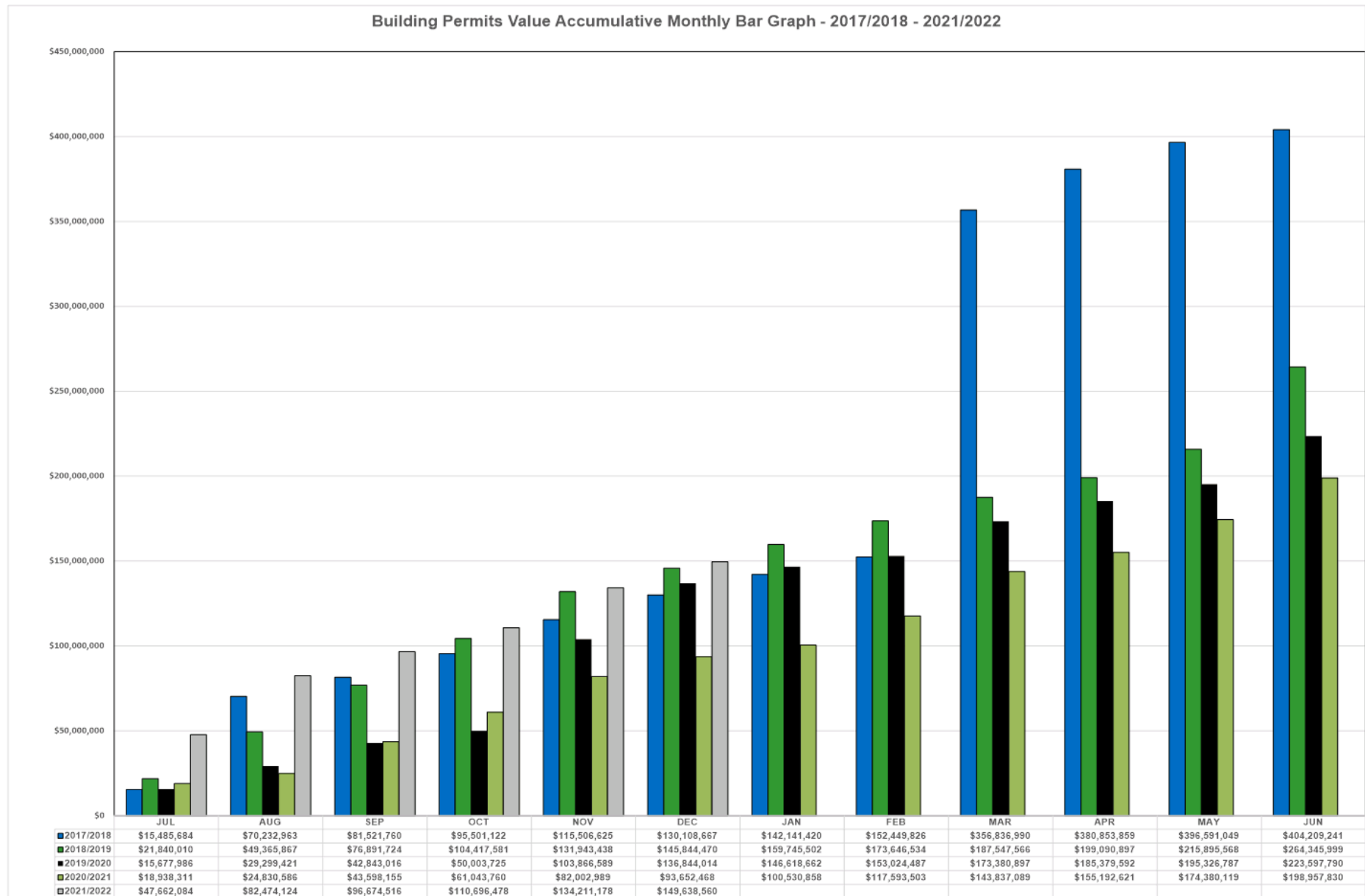
Attachment A: Building Permits Issued Accumulative Monthly Totals Bar Graph - Dec 2021 ↓ 

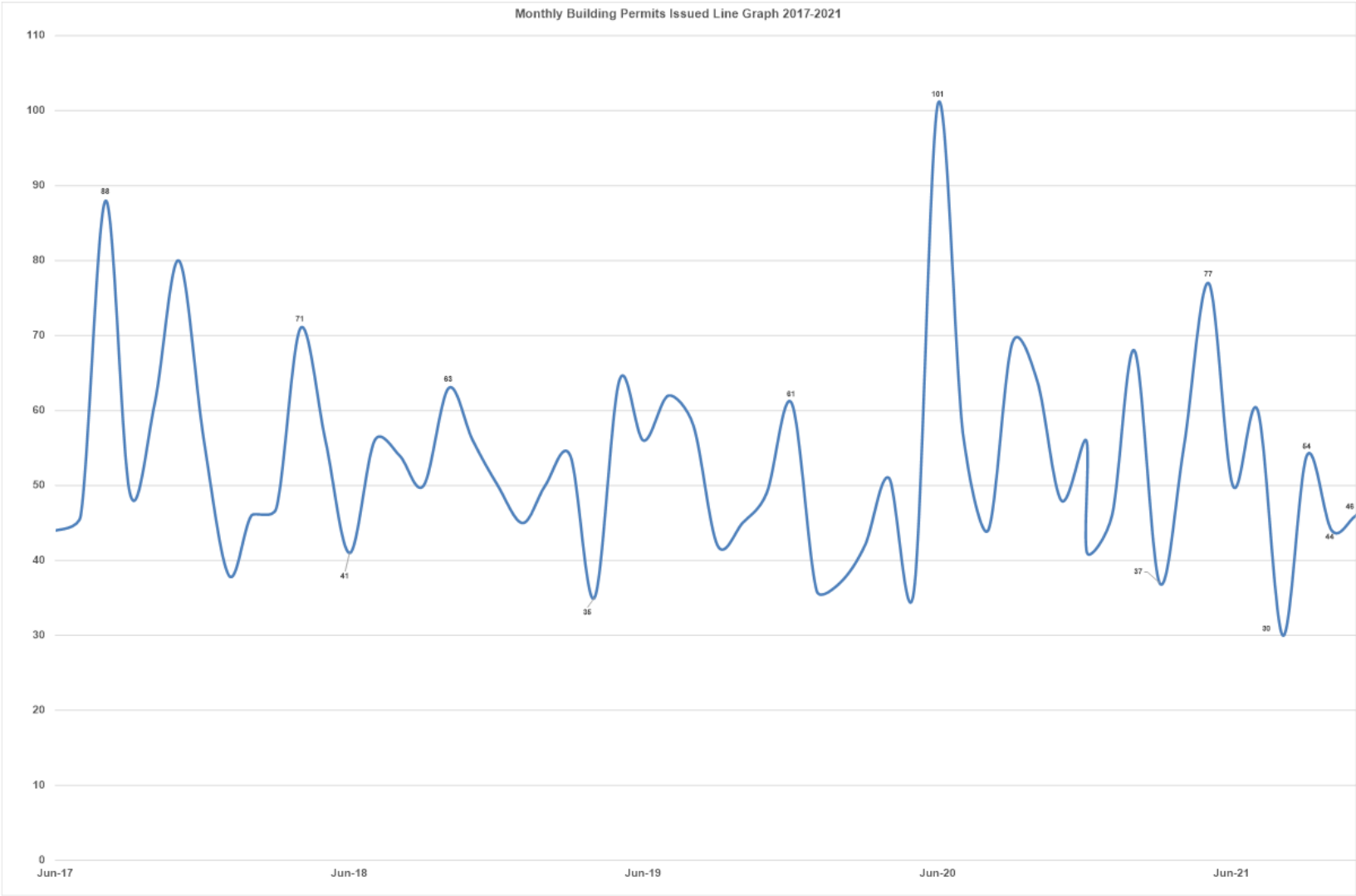
Attachment B: Building Permits Value Accumulative Monthly Bar Graph Dec 2021 ↓ 

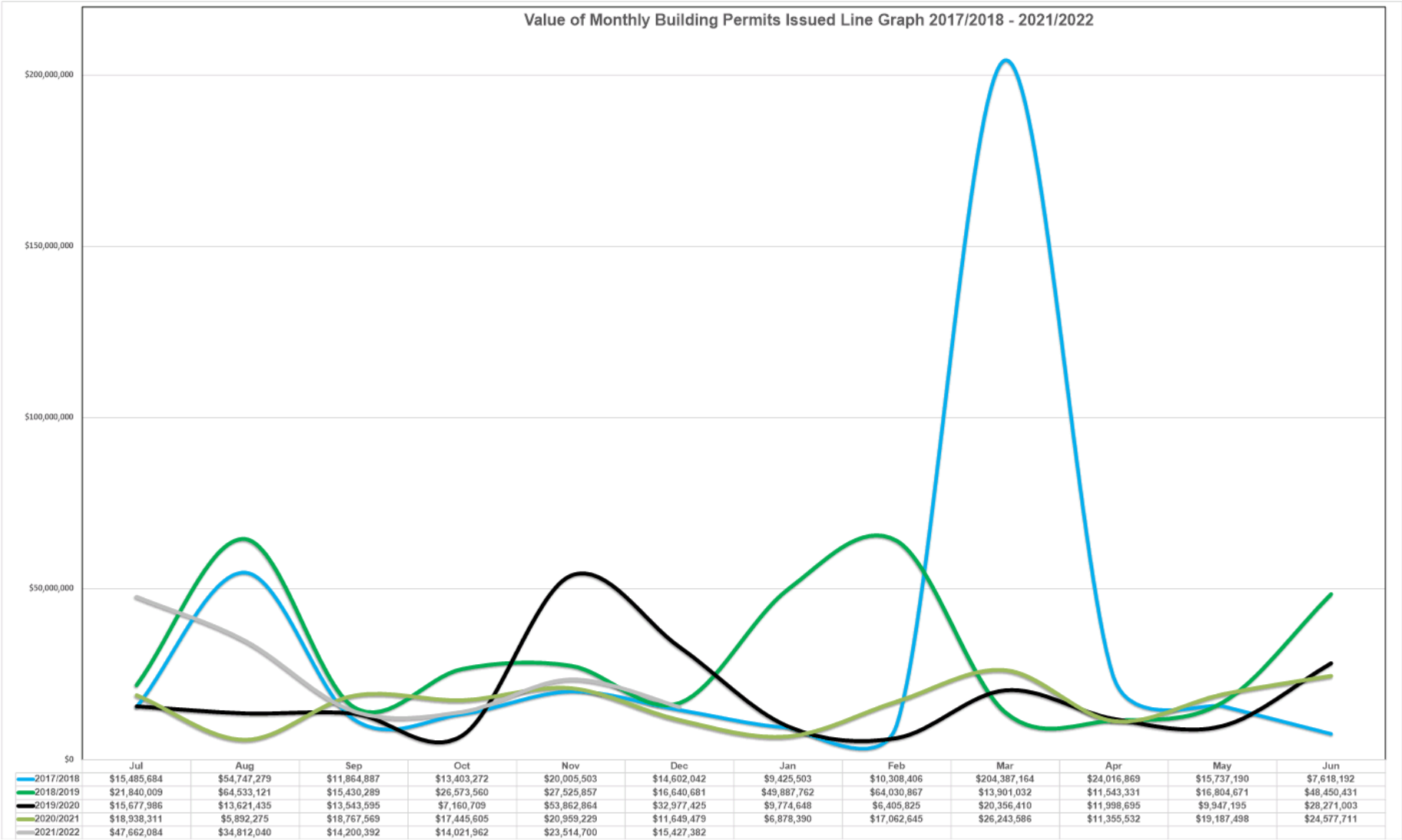
Attachment C: Monthly Building Permits Issued Line Graph Dec 2021 ↓ 

Attachment D: Value of Monthly Building Permits Issued Line Graph Dec 2021 ↓ 









8.2 Monthly Planning Statistics - 1 December - 31 December 2021
File Ref: F22/3062

Memorandum of the Director City Planning of 18 January 2022 and attachments.

Delegation: Council



City of **HOBART**

MEMORANDUM: CITY PLANNING COMMITTEE

**Monthly Planning Statistics - 1 December - 31 December
2021**

Attached is the Planning Permit statistics for the period 1 December 2021 – 31 December 2021

RECOMMENDATION

That:

The Director City Planning reports:

Planning Statistical Report:

During the period 1 December 2021 to 31 December 2021, 65 permits were issued to the value of \$58,775,140 which included:

- (i) 6 new single dwellings to the value of \$3,380,000;
- (ii) 1 multiple dwellings to the value of \$100,000;
- (iii) 25 extensions/alterations to dwellings to the value of \$3,252,204;
- (iv) 13 extensions/alterations to commercial properties to the value of \$27,507,136;
- (v) 2 major projects:
 - (a) 225 Harrington Street, Hobart - Partial Demolition, Alterations, New Building for Residential (Hostel), Alterations to Access and Associated Works - \$16,000,000;
 - (b) 87-91 Campbell Street, Hobart - Partial Demolition, Alterations, Extension and New Building for Residential (Communal Residence), Educational and Occasional Care, and Food Services - \$9,863,636;

During the period 1 December 2020 to 31 December 2020, 82 permits were issued to the value of \$31,591,689 which included:

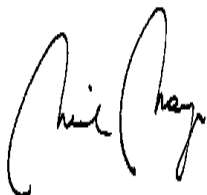
- (i) 10 new single dwellings to the value of \$3,954,000;
- (ii) 19 multiple dwellings to the value of \$6,997,000;
- (iii) 43 extensions/alterations to dwellings to the value of \$7,458,964;
- (iv) 11 extensions/alterations to commercial properties to the value of \$12,992,060;
- (v) 3 major projects:
 - (a) 23 Commercial Road, North Hobart - Partial Demolition, Alterations, Extension, New Building for Educational and Occasional Care (Gymnasium), Signage and Associated Works - \$9,400,000;
 - (b) 30 Romilly Street, South Hobart - Subdivision (Boundary Adjustment), 10 Multiple Dwellings (Nine New, One Existing), Works in Road Reserve and Associated Hydraulic Infrastructure - \$3,600,000;
 - (c) 125 Bathurst Street, Hobart - Partial Demolition and New Building for Seven Multiple Dwellings and Food Services - \$3,000,000;

In the twelve months ending December 2021, 735 permits were issued to the value of \$284,761,309; and

In the twelve months ending December 2020, 802 permits were issued to the value of \$300,100,753.





This report includes permits issued, exempt and no permit required decisions.

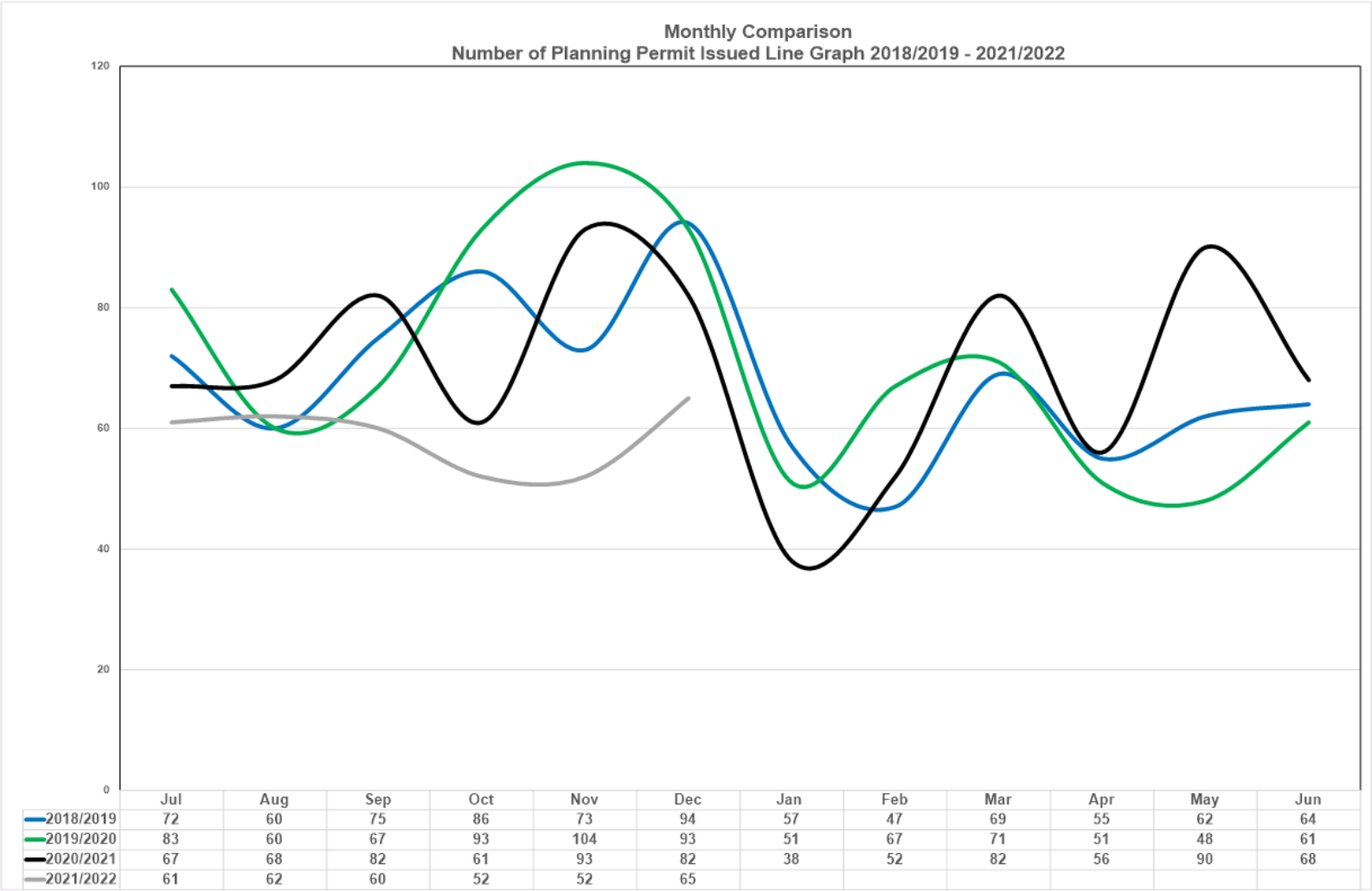
As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

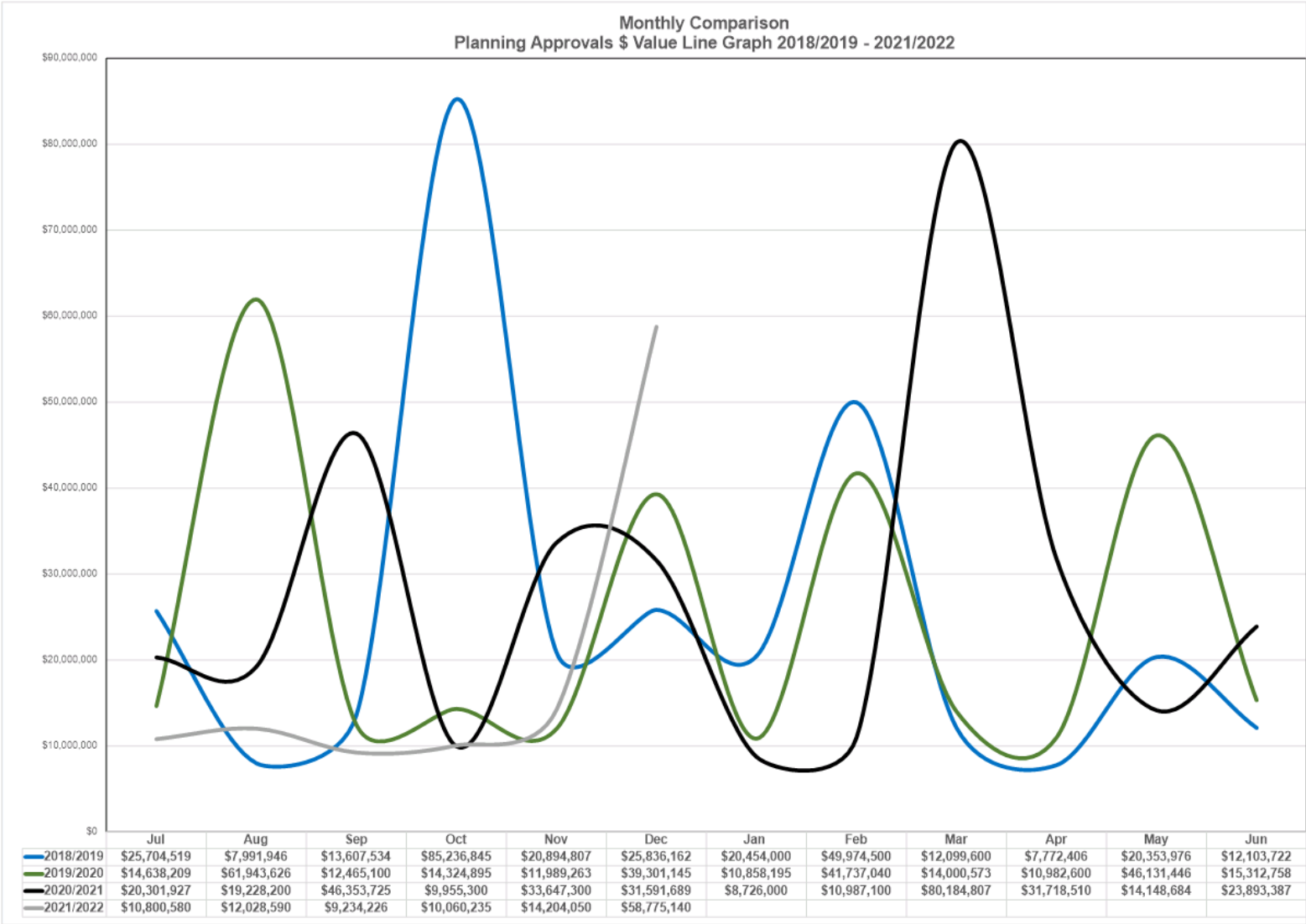


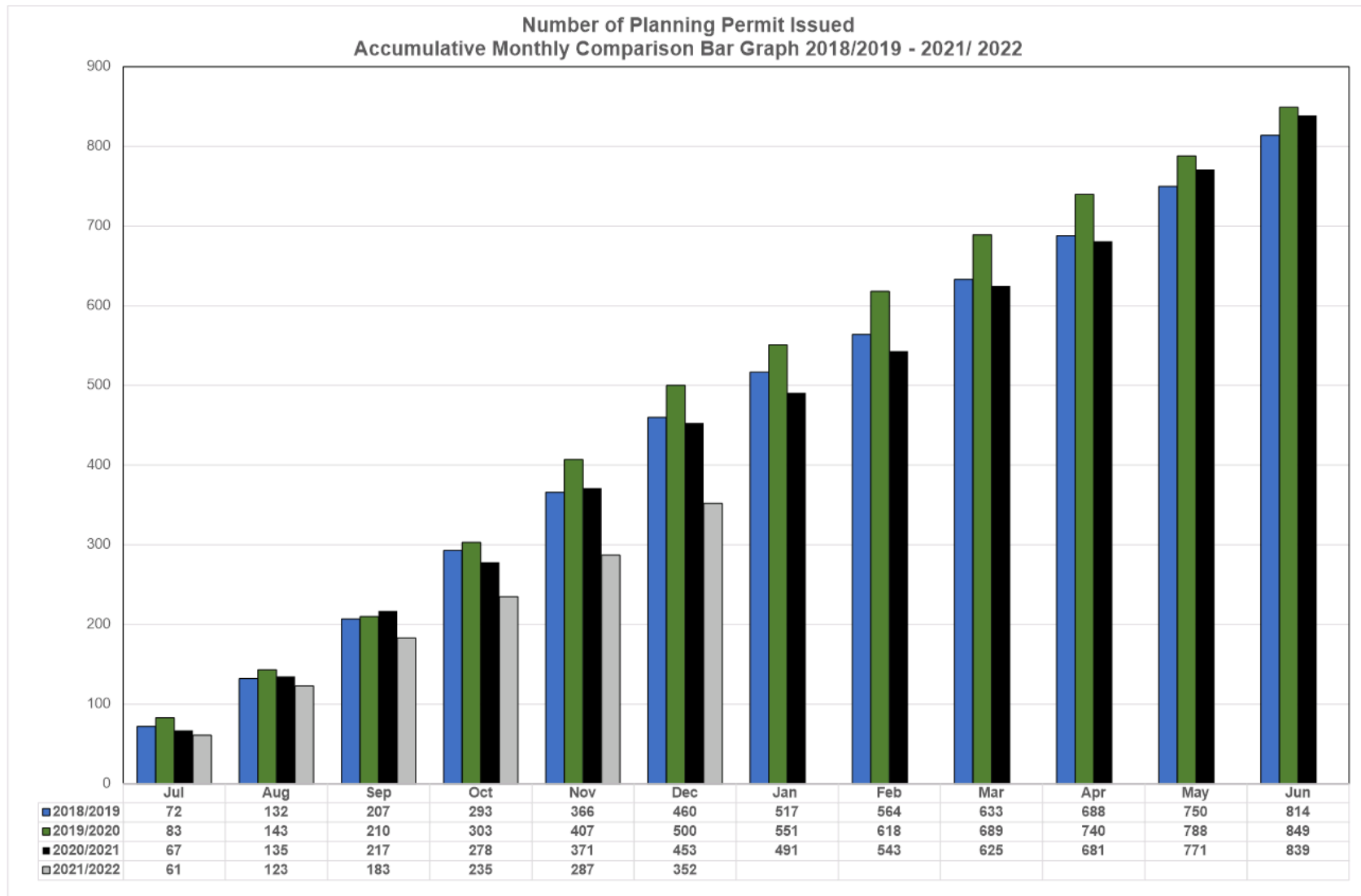
Neil Noye
DIRECTOR CITY PLANNING

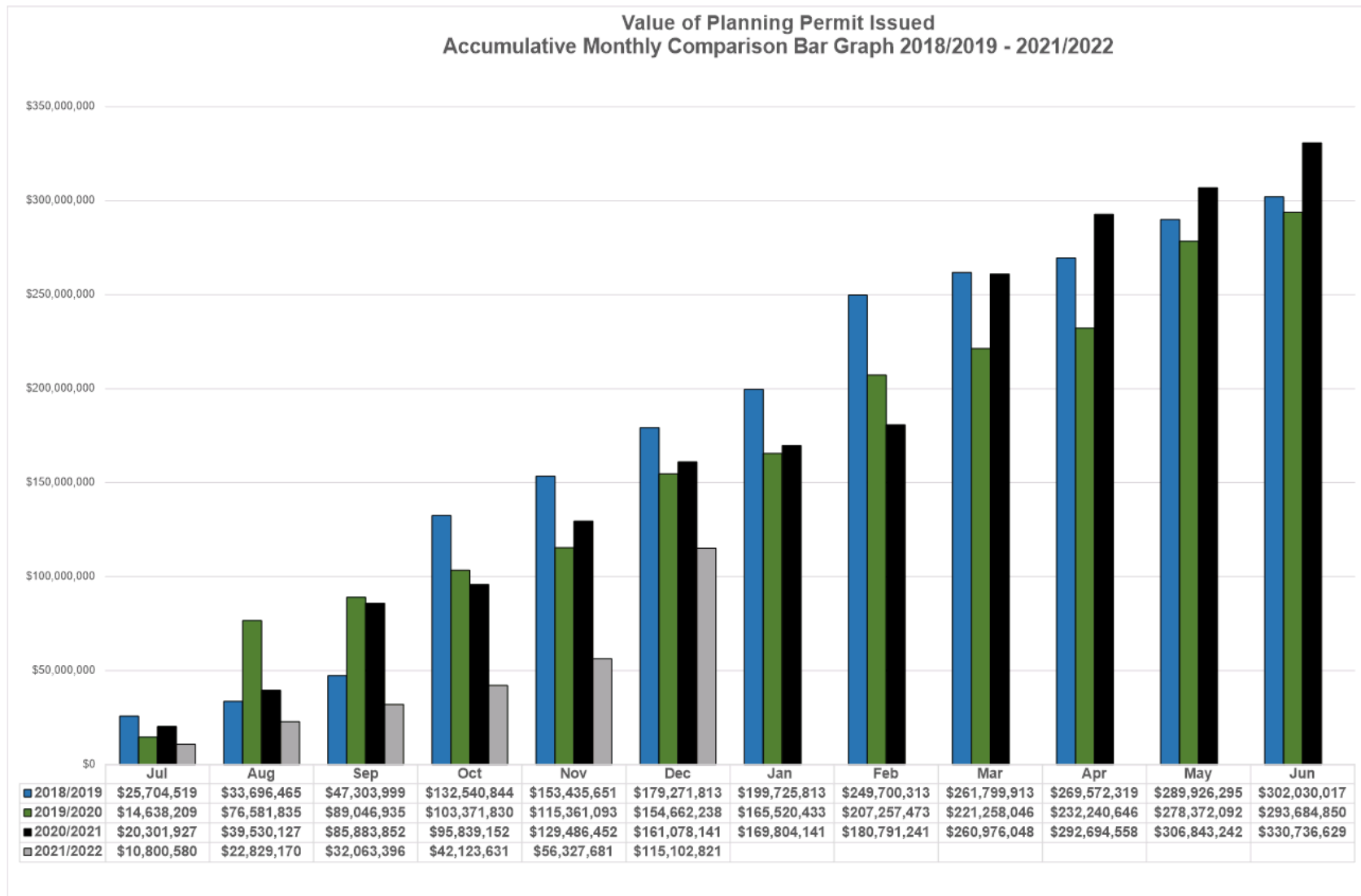
Date: 18 January 2022
File Reference: F22/3062

- Attachment A: Monthly Comparison  Number of Planning Permit Issued Line Graph Dec 2021 ↓
- Attachment B: Monthly Comparison Planning Approvals Value Line Graph Dec 2021 ↓ 
- Attachment C: Number of Planning Permit Issued Accumulative Monthly Comparison Bar Graph Dec 2021 ↓ 
- Attachment D: Value of Planning Permit Issued Bar Graph Dec 2021 ↓ 









8.3 Delegated Decision Report (Planning)
File Ref: F22/4774

Memorandum of the Director City Planning of 18 January 2022 and attachment.

Delegation: Committee



City of **HOBART**

MEMORANDUM: CITY PLANNING COMMITTEE

Delegated Decision Report (Planning)

Attached is the delegated planning decisions report for the period 6 December 2021 to 14 January 2022.

RECOMMENDATION

That:

- 1. That the information be received and noted.***

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Neil Noye
DIRECTOR CITY PLANNING

Date: 18 January 2022
File Reference: F22/4774

Attachment A: Delegated Decision Report (Planning) ↓

18 January 2022

Delegated Decisions Report (Planning)

57 applications found.

Planning Description	Address	Works Value	Decision	Approved	All
				Authority	
PLN-20-911 Partial Demolition and New Building for Visitor Accommodation, Hotel Industry, Food Services, and Community Meeting and Entertainment, and Associated Works	79 COLLINS STREET HOBART TAS 7000	\$ 22,000,000	Approved	Delegated	
PLN-21-115 Alterations to Driveway and Car Parking	141 HAMPDEN ROAD HOBART TAS 7000	\$ 50,000	Approved	Delegated	
PLN-21-476 Partial Demolition, Alterations, Signage, and Alterations to Car Parking	336 ELIZABETH STREET NORTH HOBART TAS 7000	\$ 300,000	Approved	Delegated	
PLN-21-537 Partial Change of Use to Food Services	41 BARRACK STREET HOBART TAS 7000	\$ 70,000	Approved	Delegated	
PLN-21-588 Dwelling	16 MCDEVITT AVENUE DYNMYRNE TAS 7005	\$ 320,000	Approved	Delegated	
PLN-21-604 Dwelling	16 TABART STREET NEW TOWN TAS 7008	\$ 500,000	Approved	Delegated	
PLN-21-610 Partial Demolition, Alterations and Change of Use to Three Multiple Dwellings (Two Existing, One New)	28 CROSS STREET NEW TOWN TAS 7008	\$ 100,000	Approved	Delegated	
PLN-21-613 Dwelling	11 DATE COURT SANDY BAY TAS 7005	\$ 1,360,000	Approved	Delegated	
PLN-21-615 Alterations	44-46 HAMPDEN ROAD BATTERY POINT TAS 7004	\$ 7,000	Approved	Delegated	
PLN-21-617 Partial Demolition and Ancillary Dwelling	35 MELLIFONT STREET WEST HOBART TAS 7000	\$ 200,000	Approved	Delegated	
PLN-21-639 Demolition and Outbuilding	13A BEDFORD STREET NEW TOWN TAS 7008	\$ 30,000	Approved	Delegated	
PLN-21-646 Partial Demolition, Alterations and Extension	88 SWANSTON STREET NEW TOWN TAS 7008	\$ 500,000	Approved	Delegated	
PLN-21-660 Partial Demolition, Alterations, Extension, Outbuilding (Workshop/Studio), Swimming Pool, and Front Fencing	4A D'ARCY STREET SOUTH HOBART TAS 7004	\$ 500,000	Approved	Delegated	
PLN-21-662 Change of Use to Hotel Industry and Signage	91-93 MACQUARIE STREET HOBART TAS 7000	\$ 7,500	Approved	Delegated	
PLN-21-674 Front Fencing	5 FORBES AVENUE WEST HOBART TAS 7000	\$ 1,800	Approved	Delegated	
PLN-21-684 Partial Demolition, Alterations, and Extension	1/344-346 SANDY BAY ROAD SANDY BAY TAS 7005	\$ 500,000	Approved	Delegated	
PLN-21-700 Food Services and Outdoor Dining	41 FORSTER STREET NEW TOWN TAS 7008	\$ 2,000	Approved	Delegated	
PLN-21-709 Signage	40 ELIZABETH STREET HOBART TAS 7000	\$ 0	Approved	Delegated	
PLN-21-721 Partial Demolition, Alterations and Extension	1/320B STRICKLAND AVENUE SOUTH HOBART TAS 7004	\$ 120,000	Approved	Delegated	
PLN-21-722 Partial Demolition, Alterations and Extension	228 WARWICK STREET WEST HOBART TAS 7000	\$ 200,000	Approved	Delegated	
PLN-21-723 Signage	209 BRISBANE STREET WEST HOBART TAS 7000	\$ 0	Approved	Delegated	
PLN-21-725 Signage	71 RISDON ROAD NEW TOWN TAS 7008	\$ 0	Approved	Delegated	
PLN-21-726 Garage	60A CASCADE ROAD SOUTH HOBART TAS 7004	\$ 100,000	Approved	Delegated	
PLN-21-730 Alterations	7 PAVIOUR STREET NEW TOWN TAS 7008	\$ 15,000	Approved	Delegated	

CITY OF HOBART

Planning Description	Address	Works Value	Decision	Authority
PLN-21-731 Dwelling	10 TABART STREET NEW TOWN TAS 7008	\$ 400,000	Approved	Delegated
PLN-21-735 Partial Demolition, Alterations and Extension	2/105 LETITIA STREET NORTH HOBART TAS 7000	\$ 125,000	Approved	Delegated
PLN-21-737 Alterations	97 GOULBURN STREET WEST HOBART TAS 7000	\$ 8,000	Approved	Delegated
PLN-21-738 Carport	654A SANDY BAY ROAD SANDY BAY TAS 7005	\$ 40,000	Approved	Delegated
PLN-21-744 Partial Demolition, Alterations and Extension	107 PATRICK STREET WEST HOBART TAS 7000	\$ 200,000	Approved	Delegated
PLN-21-751 Partial Demolition, Alterations, Extension & Ancillary Dwelling	78 NEWDEGATE STREET WEST HOBART TAS 7000	\$ 550,000	Approved	Delegated
PLN-21-753 Partial Demolition, Alterations and Extension	107 NEW TOWN ROAD NEW TOWN TAS 7008	\$ 450,000	Approved	Delegated
PLN-21-758 Partial Demolition and Alterations	15 COLVILLE STREET BATTERY POINT TAS 7004	\$ 90,000	Approved	Delegated
PLN-21-760 Extension to Operating Hours	37 ELIZABETH STREET HOBART TAS 7000	\$ 0	Approved	Delegated
PLN-21-761 Partial Demolition, Alterations and Decks	82 FOREST ROAD WEST HOBART TAS 7000	\$ 150,000	Approved	Delegated
PLN-21-762 Alterations and Front Fencing	101-103 HARRINGTON STREET HOBART TAS 7000	\$ 1,500	Approved	Delegated
PLN-21-765 Partial Change of Use to Visitor Accommodation	56/8 DAVEY PLACE SOUTH HOBART TAS 7004	\$ 12,000	Approved	Delegated
PLN-21-768 Partial Demolition, Alterations and Extension	338 ELIZABETH STREET NORTH HOBART TAS 7000	\$ 200,000	Approved	Delegated
PLN-21-773 Partial Demolition and Alterations	31-35 SALAMANCA PLACE BATTERY POINT TAS 7004	\$ 7,500	Approved	Delegated
PLN-21-776 Alterations, Partial Change of Use to Eating Establishment, and Signage	34 DAVEY STREET HOBART TAS 7000	\$ 50,000	Approved	Delegated
PLN-21-777 Archaeological Works	118-124 BATHURST STREET HOBART TAS 7000	\$ 100,000	Approved	Delegated
PLN-21-780 Partial Demolition, Alterations and Extension	102 KING STREET SANDY BAY TAS 7005	\$ 95,000	Approved	Delegated
PLN-21-785 Partial Demolition, Alterations and Extension	437 CHURCHILL AVENUE SANDY BAY TAS 7005	\$ 250,000	Approved	Delegated
PLN-21-786 Partial Demolition, Alterations and Extension	95 HILL STREET WEST HOBART TAS 7000	\$ 80,000	Approved	Delegated
PLN-21-789 Partial Demolition and Alterations and Change of Use to Dwelling	155 NEW TOWN ROAD NEW TOWN TAS 7008	\$ 50,000	Approved	Delegated
PLN-21-790 Alterations and Extension to Outbuilding	2 SATCHELL DRIVE KINGSTON TAS 7050	\$ 15,000	Approved	Delegated
PLN-21-792 Outbuilding	2A D'ARCY STREET SOUTH HOBART TAS 7004	\$ 30,000	Approved	Delegated
PLN-21-799 Deck Extension	31 D'ARCY STREET SOUTH HOBART TAS 7004	\$ 3,000	Approved	Delegated
PLN-21-806 Partial Demolition, Alterations and Extension	24 ALLAMBEE CRESCENT GLEBE TAS 7000	\$ 150,000	Approved	Delegated
PLN-21-811 Alterations (Solar Panels)	83 BROOKER AVENUE GLEBE TAS 7000	\$ 2,370	Approved	Delegated
PLN-21-812 Alterations	3/38 CUTHBERTSON PLACE LENA VALLEY TAS 7008	\$ 23,204	Approved	Delegated

Planning Description	Address	Works Value	Decision	Authority
PLN-21-817 Signage	90-92 MURRAY STREET HOBART TAS 7000	\$ 0	Approved	Delegated
PLN-21-818 Extension to Operating Hours	73 COLLINS STREET HOBART TAS 7000	\$ 0	Approved	Delegated
PLN-21-824 Change of Use to Visitor Accommodation	2 BAY ROAD (CT 162241/1) NEW TOWN TAS 7008	\$ 0	Approved	Delegated
PLN-21-828 Partial Demolition, Alterations and Extension	116A FOREST ROAD WEST HOBART TAS 7000	\$ 180,000	Approved	Delegated
PLN-21-832 Partial Demolition, Alterations and Extension	29 CROMWELL STREET BATTERY POINT TAS 7004	\$ 450,000	Approved	Delegated
PLN-21-836 Change of Use to Visitor Accommodation	169 GOULBURN STREET WEST HOBART TAS 7000	\$ 0	Approved	Delegated
PLN-21-853 Change of Use to Visitor Accommodation	1/66A MONTAGU STREET NEW TOWN TAS 7008	\$ 0	Approved	Delegated

8.4 City Planning - Advertising Report
File Ref: F22/5228

Memorandum of the Director City Planning of 19 January 2022 and attachment.

Delegation: Committee



City of **HOBART**

MEMORANDUM: CITY PLANNING COMMITTEE

City Planning - Advertising Report

Attached is the advertising list for the period 6 December 2021 to 14 January 2022.

RECOMMENDATION

That:

- 1. That the information be received and noted.**

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Neil Noye
DIRECTOR CITY PLANNING

Date: 19 January 2022
File Reference: F22/5228

Attachment A: City Planning - Advertising Report ↓ 

Application	Street	Suburb	Development	Works Value	Expiry Date	Referral	Proposed Delegation	Advertising Period Start	Advertising Period End
PLN-21-660	4 A D'ARCY STREET	SOUTH HOBART	Partial Demolition, Alterations, Extension, Outbuilding (Workshop/Studio), Swimming Pool, and Front Fencing	\$500,000	29/12/2021	ayersh	Director	07/12/2021	21/12/2021
PLN-21-721	1 / 320 B STRICKLAND AVENUE	SOUTH HOBART	Partial Demolition, Alterations and Extension	\$120,000	31/12/2021	ayersh	Director	07/12/2021	21/12/2021
PLN-21-662	91 - 93 MACQUARIE STREET	HOBART	Change of Use to Hotel Industry and Signage	\$7,500	27/12/2021	ayersh	Director	08/12/2021	22/12/2021
PLN-21-513	251 DAVEY STREET	SOUTH HOBART	Outbuilding	\$150,000	30/12/2021	ayersh	Director	09/12/2021	23/12/2021
PLN-21-817	90 - 92 MURRAY STREET	HOBART	Signage	\$0	11/01/2022	ayersh	Director	16/12/2021	06/01/2022
PLN-21-388	1 - 7 CEDAR COURT	SANDY BAY	Partial Demolition, Alterations, Extension, Front Fencing, Garage, Alterations to Access, and Associated Works	\$850,000	26/01/2022	ayersh	Council (Council Land)	17/12/2021	07/01/2022
PLN-21-806	24 ALLAMBEE CRESCENT	GLEBE	Partial Demolition, Alterations and Extension	\$150,000	22/01/2022	ayersh	Director	21/12/2021	11/01/2022
PLN-21-802	26 WEERONA AVENUE	MOUNT STUART	Partial Demolition, Alterations and Extension	\$600,000	27/02/2022	ayersh	Director	10/01/2022	24/01/2022
PLN-20-611	30 FISHER AVENUE	SANDY BAY	Driveway and Carparking	\$20,000	24/01/2022	baconr	Director	17/12/2021	07/01/2022
PLN-21-871	85 CREEK ROAD	NEW TOWN	Public Art Installation	\$70,000	14/02/2022	baconr	Director	10/01/2022	24/01/2022

Application	Street	Suburb	Development	Works Value	Expiry Date	Referral	Proposed Delegation	Advertising Period Start	Advertising Period End
PLN-21-454	1 / 816 SANDY BAY ROAD	SANDY BAY	Partial Demolition, Alterations, and Extension	\$140,000	22/02/2022	langd	Council (Objection)	07/12/2021	21/12/2021
PLN-21-799	31 D'ARCY STREET	SOUTH HOBART	Deck Extension	\$3,000	13/01/2022	langd	Director	07/12/2021	21/12/2021
PLN-21-708	109 MARLYN ROAD	SOUTH HOBART	Partial Demolition, Alterations, and Driveway	\$325,000	18/01/2022	langd	Director	16/12/2021	06/01/2022
PLN-21-637	796 HUON ROAD	FERN TREE	Partial Demolition, Alterations, and Extension	\$100,000	26/02/2022	langd	Director	10/01/2022	24/01/2022
PLN-21-745	9 / 1 A SAYER CRESCENT	SANDY BAY	Visitor Accommodation	\$0	28/02/2022	maxwellv	Director	10/01/2022	24/01/2022
PLN-21-821	51 / 19 A HUNTER STREET	HOBART	Partial Demolition, Alterations and Change of Use to Consulting Rooms	\$150,000	03/03/2022	maxwellv	Director	10/01/2022	24/01/2022
PLN-21-841	9 OSBORNE STREET	SANDY BAY	Partial Demolition, Alterations, Extension and Ancillary Dwelling	\$40,000	14/02/2022	maxwellv	Director	10/01/2022	24/01/2022
PLN-21-845	293 MACQUARIE STREET	HOBART	Signage	\$0	28/02/2022	maxwellv	Director	10/01/2022	24/01/2022
PLN-21-580	345 SANDY BAY ROAD	SANDY BAY	Demolition, New Building for 7 Multiple Dwellings, and Associated Works	\$5,000,000	07/02/2022	maxwellv	Council (Council Land)	13/01/2022	28/01/2022
PLN-21-798	164 HARRINGTON STREET	HOBART	Alterations	\$50,000	19/02/2022	maxwellv	Director	13/01/2022	28/01/2022
PLN-21-722	228 WARWICK STREET	WEST HOBART	Partial Demolition, Alterations and Extension	\$200,000	10/01/2022	mcclenahanm	Director	09/12/2021	23/12/2021
PLN-21-781	8 LIPSCOMBE AVENUE	SANDY BAY	Partial Demolition & Alterations	\$100,000	19/01/2022	mcclenahanm	Director	13/12/2021	02/01/2022

Application	Street	Suburb	Development	Works Value	Expiry Date	Referral	Proposed Delegation	Advertising Period Start	Advertising Period End
PLN-21-684	1 / 344 - 346 SANDY BAY ROAD	SANDY BAY	Partial Demolition, Alterations, and Extension	\$500,000	07/01/2022	mcclenahanm	Director	14/12/2021	04/01/2022
PLN-21-726	60 A CASCADE ROAD	SOUTH HOBART	Garage	\$100,000	12/02/2022	mcclenahanm	Director	16/12/2021	06/01/2022
PLN-21-629	64 ANGLESEA STREET	SOUTH HOBART	Community Shed and Alterations to Carparking	\$700,000	14/01/2022	mcclenahanm	Director	21/12/2021	11/01/2022
PLN-21-707	63 - 83 CREEK ROAD	NEW TOWN	Six Multiple Dwellings and Associated Works	\$1,500,000	18/01/2022	mcclenahanm	Director	23/12/2021	13/01/2022
PLN-21-853	1 / 66 A MONTAGU STREET	NEW TOWN	Change of Use to Visitor Accommodation	\$0	29/01/2022	mcclenahanm	Director	23/12/2021	13/01/2022
PLN-21-514	89 DOYLE AVENUE	LENAH VALLEY	Dwelling	\$250,000	28/02/2022	mcclenahanm	Director	10/01/2022	24/01/2022
PLN-21-800	519 NELSON ROAD	MOUNT NELSON	Partial Demolition, Alterations, Extension and Carport	\$200,000	27/01/2022	mcclenahanm	Director	10/01/2022	24/01/2022
PLN-21-372	481 MACQUARIE STREET	SOUTH HOBART	Partial Demolition, Alterations, Extension and Garage	\$350,000	30/01/2022	mcclenahanm	Director	12/01/2022	27/01/2022
PLN-21-804	14 SMITHURST AVENUE	SOUTH HOBART	Partial Demolition and Alterations	\$20,000	03/03/2022	mcclenahanm	Director	12/01/2022	27/01/2022
PLN-21-777	118 - 124 BATHURST STREET	HOBART	Archaeological Works	\$100,000	04/01/2022	obrienm	Director	13/12/2021	02/01/2022
PLN-21-461	37 PITT STREET	NORTH HOBART	Partial Demolition, Alterations, and Extension	\$150,000	19/08/2021	obrienm	Director	14/12/2021	04/01/2022
PLN-21-744	107 PATRICK STREET	WEST HOBART	Partial Demolition, Alterations and Extension	\$200,000	17/01/2022	obrienm	Director	23/12/2021	13/01/2022

Application	Street	Suburb	Development	Works Value	Expiry Date	Referral	Proposed Delegation	Advertising Period Start	Advertising Period End
PLN-21-759	5 SHARPS ROAD	LENAH VALLEY	Partial Demolition, Alterations and Extension	\$180,000	24/01/2022	obrienm	Director	10/01/2022	24/01/2022
PLN-21-792	2 A D'ARCY STREET	SOUTH HOBART	Outbuilding	\$30,000	31/12/2021	sherrifc	Director	07/12/2021	21/12/2021
PLN-21-751	78 NEWDEGATE STREET	WEST HOBART	Partial Demolition, Alterations, Extension & Ancillary Dwelling	\$550,000	15/01/2022	sherrifc	Director	13/12/2021	02/01/2022
PLN-21-828	116 A FOREST ROAD	WEST HOBART	Partial Demolition, Alterations and Extension	\$180,000	20/01/2022	sherrifc	Director	16/12/2021	06/01/2022
PLN-21-832	29 CROMWELL STREET	BATTERY POINT	Partial Demolition, Alterations and Extension	\$450,000	18/01/2022	sherrifc	Director	17/12/2021	07/01/2022
PLN-21-790	2 SATCHELL DRIVE	KINGSTON	Alterations and Extension to Outbuilding	\$15,000	15/01/2022	sherrifc	Director	21/12/2021	11/01/2022
PLN-21-846	45 DAVEY STREET	HOBART	Alterations (Solar Panels)	\$19,500	04/02/2022	sherrifc	Director	10/01/2022	24/01/2022
PLN-21-829	5 EURELLA AVENUE	SANDY BAY	Partial Demolition, Alterations, Extension	\$200,000	25/01/2022	sherrifc	Director	10/01/2022	24/01/2022
PLN-21-844	10 EVANS STREET	HOBART	Partial Demolition	\$30,000	17/02/2022	sherrifc	Director	10/01/2022	24/01/2022
PLN-21-643	5 ALEXANDER STREET	SANDY BAY	Demolition and Three Multiple Dwellings	\$1,000,000	27/01/2022	sherrifc	Director	13/01/2022	28/01/2022
PLN-21-317	486 A HUON ROAD	SOUTH HOBART	Extension	\$170,000	15/02/2022	smeea	Director	13/12/2021	02/01/2022
PLN-21-593	25 DOWDING CRESCENT	NEW TOWN	Dwelling	\$456,941	28/01/2022	smeea	Director	10/01/2022	24/01/2022
PLN-21-859	20 / 37 - 39 CAMPBELL STREET	HOBART	Change of Use to Visitor Accommodation	\$0	01/02/2022	smeea	Director	10/01/2022	24/01/2022

Application	Street	Suburb	Development	Works Value	Expiry Date	Referral	Proposed Delegation	Advertising Period Start	Advertising Period End
PLN-21-649	232 - 242 LIVERPOOL STREET	HOBART	Partial Demolition, Alterations, Partial Change of Use to Business and Professional Services and General Retail and Hire, and Signage	\$200,000	01/02/2022	smeea	Council (Council Land)	13/01/2022	28/01/2022
PLN-21-639	13 A BEDFORD STREET	NEW TOWN	Demolition and Outbuilding	\$30,000	13/01/2022	widdowsont	Director	08/12/2021	22/12/2021
PLN-21-773	31 - 35 SALAMANCA PLACE	BATTERY POINT	Partial Demolition and Alterations	\$7,500	15/01/2022	widdowsont	Director	09/12/2021	23/12/2021
PLN-21-818	73 COLLINS STREET	HOBART	Extension to Operating Hours	\$0	12/01/2022	widdowsont	Director	14/12/2021	04/01/2022
PLN-21-700	41 FORSTER STREET	NEW TOWN	Food Services and Outdoor Dining	\$2,000	14/01/2022	widdowsont	Director	16/12/2021	06/01/2022
PLN-21-811	83 BROOKER AVENUE	GLEBE	Alterations (Solar Panels)	\$2,370	11/01/2022	widdowsont	Director	17/12/2021	07/01/2022
PLN-21-827	26 QUEEN STREET	SANDY BAY	Alterations	\$8,500	03/02/2022	widdowsont	Director	10/01/2022	24/01/2022

9. QUESTIONS WITHOUT NOTICE

Section 29 of the *Local Government (Meeting Procedures) Regulations 2015*.
File Ref: 13-1-10

An Elected Member may ask a question without notice of the Chairman, another Elected Member, the Chief Executive Officer or the Chief Executive Officer's representative, in line with the following procedures:

1. The Chairman will refuse to accept a question without notice if it does not relate to the Terms of Reference of the Council committee at which it is asked.
2. In putting a question without notice, an Elected Member must not:
 - (i) offer an argument or opinion; or
 - (ii) draw any inferences or make any imputations – except so far as may be necessary to explain the question.
3. The Chairman must not permit any debate of a question without notice or its answer.
4. The Chairman, Elected Members, Chief Executive Officer or Chief Executive Officer's representative who is asked a question may decline to answer the question, if in the opinion of the respondent it is considered inappropriate due to its being unclear, insulting or improper.
5. The Chairman may require a question to be put in writing.
6. Where a question without notice is asked and answered at a meeting, both the question and the response will be recorded in the minutes of that meeting.
7. Where a response is not able to be provided at the meeting, the question will be taken on notice and
 - (i) the minutes of the meeting at which the question is asked will record the question and the fact that it has been taken on notice.
 - (ii) a written response will be provided to all Elected Members, at the appropriate time.
 - (iii) upon the answer to the question being circulated to Elected Members, both the question and the answer will be listed on the agenda for the next available ordinary meeting of the committee at which it was asked, where it will be listed for noting purposes only.

10. CLOSED PORTION OF THE MEETING

That the Committee resolve by majority that the meeting be closed to the public pursuant to regulation 15(1) of the *Local Government (Meeting Procedures) Regulations 2015* because the items included on the closed agenda contain the following matters:

- Confirm the minutes of the Closed portion of the meeting
- Questions without notice in the Closed portion
- Planning Appeals

The following items were discussed: -

- | | |
|----------------|---|
| Item No. 1 | Minutes of the last meeting of the Closed Portion of the Committee Meeting |
| Item No. 2 | Consideration of supplementary items to the agenda |
| Item No. 3 | Indications of pecuniary and conflicts of interest |
| Item No. 4 | Planning Authority Items – Consideration of Items with Deputations |
| Item No. 5 | City Acting as Planning Authority |
| Item No. 5.1 | Applications under the Hobart Interim Planning Scheme 2015 |
| Item No. 5.1.1 | PLN-20-868 - 2 Sayer Crescent Sandy Bay - Appeal
LG(MP)R 15(4)(a) |
| Item No. 5.1.2 | PLN-21-559 - 66 Alexander Street, Sandy Bay - Appeal -
Mediation
LG(MP)R 15(4)(a) |
| Item No. 6 | Questions Without Notice |